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The Journal of the Fire Protection Profession

MAY 28, 1930

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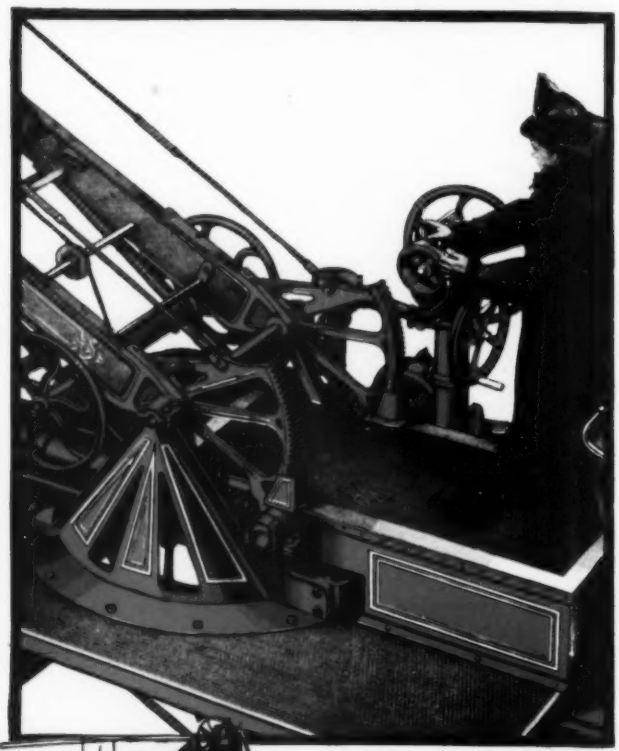

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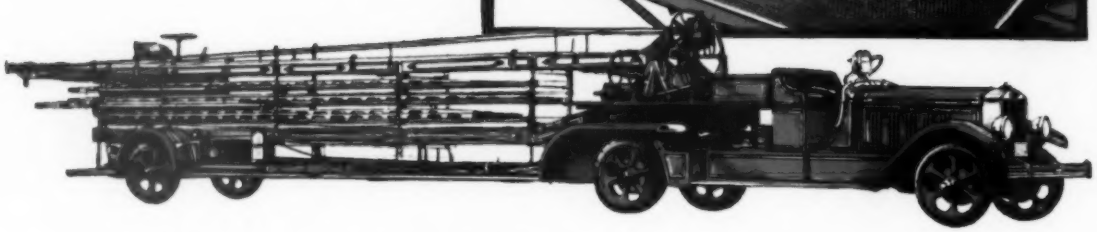

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A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER

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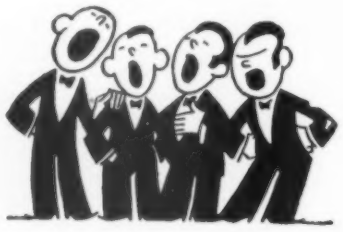

When Good Fellows Get Together

BREATHES there a soul in the fire department field who isn't planning to attend one or another of the many conventions scheduled for these coming summer months?

¶ Firemanic conventions seem to be getting bigger, better and more numerous, simply because fire chiefs are realizing more and more how important it is to get the other fellow's viewpoint. In no other calling do men, without thought of monetary gain, share their experienced knowledge so willingly and wholeheartedly.

¶ Those unfortunates who are unable to get away to a convention have the consolation at least in knowing that they can depend upon getting the whole story in FIRE ENGINEERING. Our pencils and cameras are sharpened and tuned—all ready to bring home the bacon.

The Publishers

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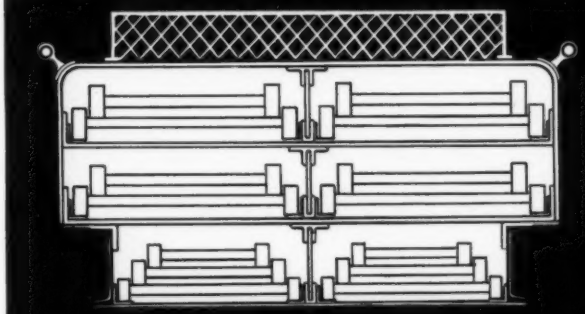

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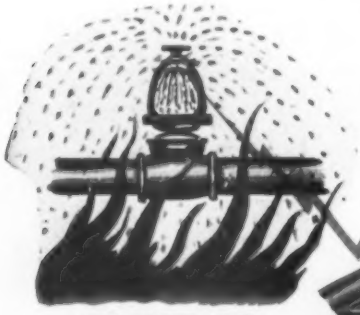

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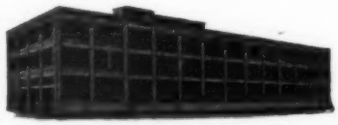

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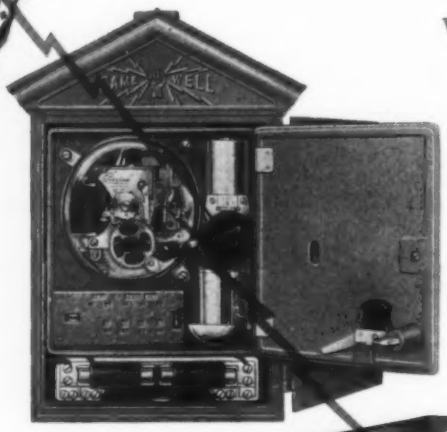

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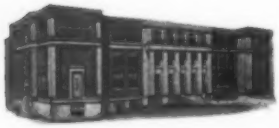

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Lewiston, Me.	Lawrence, Mass.	Lynn, Mass.
Gardner, Mass.	Binghamton, N. Y.	White Plains, N. Y.
Asheville, N. C.	Burlington, N. C.	Charlotte, N. C.
Cleveland, Ohio	Bethlehem, Pa.	Wichita Falls, Texas
Burlington, Vt.	Newport News, Va.	Norfolk, Va.
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The Journal of the Fire Protection Profession

VOLUME LXXXIII MAY 28, 1930 NUMBER 11

When May Circumstantial Evidence be Used to Prove Arson?

Circumstances Where Such Evidence is Permissible in Law—Other Important Legal Decisions of Interest to Firemen

By LEO T. PARKER, Attorney-at-Law

IN almost all litigations involving the crime of arson it is necessary, for a valid conviction, that the accused confess his guilt or the testimony shows beyond a reasonable doubt that he is guilty. In other words, a convitcion cannot rest on mere suspicion.

For illustration, in Williams vs. State, 169 N. E. 698, it was disclosed that the owner of a store insured it for full value. Soon afterward he purchased three gallons of gasoline and took it upon the second floor of the building. During the night the building partly burned. After the fire was extinguished a rag saturated with kerosene was found on the second floor. Also, straw, torn paper, etc., was found on this floor.

In view of this testimony the lower Court convicted the store owner of arson, but the higher Court reversed the verdict, explaining the law in the following language:

"The fact that a rag having about it the odor of kerosene was found in one of the rooms of the building proves nothing. It was not used to kindle the fire and was not in the room where the fire was burning. The presence of the straw and shredded paper and other rubbish is fully and satisfactorily explained by the use that was being made of the building. There are many suspicious circumstances connected with this fire, but a conviction cannot rest on suspicions. . . . In cases of arson it is now recognized as the universal rule that it is not only necessary . . . that the evidence disclose the burning of the building as charged, but 'it must appear that the burning was by the willful act of some person criminally responsible, and not the result of natural or accidental means'. . . . The law implies that the fire was the result of accident or some providential cause, rather than a criminal design, unless the evidence proves otherwise."

Circumstantial Evidence Proves Arson

On the other hand, frequently, a property owner may be convicted of the crime of arson by circumstances or testimony which indicated beyond reasonable doubt to a jury that the accused person is guilty. An example of this phase of the law is supplied by the records of the recent case of Commonwealth vs. Sorval, 169 N. E. 790.

In this case a property owner was arrested and charged with setting fire to his house for the purpose of obtaining insurance money. During the trial he testified that he was not at his home when the fire started. Other testimony was introduced showing that the man actually was home when the fire started. Especially in view of this testimony the jury convicted him. He appealed to the higher Court contending that the conviction was illegal. However, the higher Court upheld the jury's decision, saying:

"It is a circumstance which, together with the other links of circumstances in this case, may be considered as an inference as to whether or not he (property owner) is telling the truth. . . . If the testimony of the defendant (property owner) respecting his whereabouts at the time the fire was set were believed to be so improbable as to be unworthy of belief, the jury could reject it. In such circumstances it might be found to affect his credibility."

Arson Conviction Held Invalid

A peculiar legal situation arose in the case of Kauz vs. State, 124 So. 177. Here a person who committed arson was informed by the prosecutor that "if he told the truth he would go free."

The accused person admitted that he had set fire to and burned a building, but that he was assisted by another party. The assistant was arrested and convicted, but the principal was set free. The higher Court promptly rendered a judgment which also set free the accessory, stating the following important law:

"Where an accessory is indicted as for a substantive felony he may be tried and sentenced whether the principal has or has not been convicted. But where, as here, the information charges the dependent offense in the mode of the common law, the common-law rule is that the accessory can be tried with the principal or separately after his conviction, but he cannot be tried before the principal unless he consents to be so tried. . . . In other words, an accessory indicted in the common-law mode may be tried with the principal or thereafter, and a verdict of guilty may be lawfully rendered as to the accessory before a judgment of guilt is actually pronounced upon the principal by the Court. . . . Under these circumstances, the accessory being charged only with the dependent offense in the mode of the common law, no valid

"In the cases of arson it is now recognized as the universal rule that it is not only necessary . . . that the evidence disclose the burning of the building as charged, but 'it must appear that the burning was by the wilful act of some person criminally responsible and not the result of natural or accidental means.' "—Court Decision. "If the testimony of the defendant respecting his whereabouts at the time the fire was set were believed so improbable as to be unworthy of belief, the jury could reject it. In such circumstances it might be found to affect his credibility."—Another Court Decision.

judgment of conviction can be entered against the accessory upon this information."

What is False Arrest?

Since in many cities the members of fire departments have authority to make arrests, it is well to know the circumstances under which a municipality or an individual is liable in damages for falsely arresting any person accused of a crime. Generally speaking, if the accused person is innocent of the crime, and he was detained by a municipal officer or other private employe, who acted within the scope of the employment, the city or employer is liable.

For instance, in the recent case of McLoughlin vs. New York, 169 N. E. 277, it was disclosed that two employes accused a person of committing a theft. One of the employes placed his hand upon the person's shoulder and said: "Come with us, you are under arrest." The person went with the employes and he was placed in a cell at the police station. Later it was proved that he was not guilty of the offense and he sued the employer for damages.

In view of the fact that the employer's employes had placed their hands upon the person's shoulder, the Court held the employer liable for false arrest, and said:

"It is immaterial that the defendant's servants employed no physical force against the body of the plaintiff (arrested person) to restrain him. It is enough that, when force sufficient to dominate the situation was displayed, the plaintiff yielded submission and journeyed peaceably, though under compulsion, to the police station. . . . It is clear, also, that the arrest and imprisonment, if made, were without justification. Private persons may not make an arrest except for a crime committed in their presence, or for a felony which has been committed although not in their presence. . . . It follows that a cause of action for false imprisonment accrues whenever a person is arrested and detained by one not an officer acting without a warrant when no crime has in fact been committed by him, no matter with what good faith the party who caused the arrest acted . . . Hatch and Donovan were private persons; they made an arrest without a warrant for a felony which had never been committed. Consequently, they were guilty of a false imprisonment."

When Railway Company is Liable for Injury to Fire Apparatus

Frequently the higher Courts have held that a railroad engineer is bound to operate his train in day time and night time so that he may stop the locomotive within the distance illuminated by the headlights, when the same are necessary. However, this rule does not always apply if the engineer sounds a whistle warning the operators of fire apparatus of the approach of the train.

For example, in Del Buono vs. Illinois Cent. R. Co., 124 So. 694, it was disclosed that a truck was struck by a locomotive during a terrific downpour of rain in the day time, resulting in serious injury to the driver who sued the railway company for damages. The counsel for the injured driver contended that the railroad engineer was negligent because the range of the headlights was so obstructed by the terrific downpour that the engineer could see only a short distance ahead, and that the speed was such that the train could not be stopped within the distance illuminated by the headlights. In other words, it was contended that under all circumstances and in all localities a locomotive must be operated only at such speed as will permit of its being brought to a complete stop within the distance illuminated by its headlights.

Hower, since it was proved that the engineer had blown the whistle on approaching the crossing, the Court held the engineer not negligent, and said:

"To require of trains that they shall at all times operate at such speed as will permit of their being stopped within the distance illuminated by their headlights would seriously interfere with train schedules, in which the general public is as much interested as are railroad companies. . . . An engineer may approach a crossing with the full expectation that those who wish to cross the track will have due regard for the superior right of the train. . . . We are forced to the conclusion that the fact that the rain obstructed the vision of the engineer had no causal connection with the accident, so far as the operatives of the train are concerned."

Thirteen Airplanes Destroyed in a Hangar Fire

When fire broke out in the hangar of the New York Air Terminals, Inc., Hadley Field, South Plainfield, N. J., thirteen airplanes were destroyed. In some parts, the heat was so intense that it was impossible for firemen from surrounding towns to approach the fire. The photograph shows flames licking up the last of one plane.

Duty of Electric Company to Turn Off Current in Power Lines Near Fire

The law is well established that all persons and companies are liable in damages for injuries resulting from negligence. For instance, in Osborne vs. Tennessee Electric Power Company, 12 S. W. (2d) 947, it was disclosed that an electric power company received notice that a building was on fire near one of the high voltage wires. The power company neglected to turn off the current and the fire caused the wire to burn in two, which fell and caused the death of a fireman. The Court held the fireman's dependents entitled to damages and said:

"Undoubtedly if timely informed of the character of the menace which their wires had become they owed the deceased that degree of care that any ordinarily prudent man would have used under the circumstances to relieve the situation of the particular peril of the wires, and that care, whether it was to turn off the current or to send men two miles to cut the wires, or to take less efficient means, was commensurate with the danger to be avoided, and the deceased fireman himself was obligated to use all means that an ordinarily prudent man would have used under the circumstances to look out for his own safety. . . . We do not mean to say that in every instance the defendant should cut off its current upon being advised that its line is endangered. The character of the notice received, the nature of the threatened danger, the situation of the informant, his appearance and position, and other circumstances, are to be considered in deciding whether it is prudent and proper to cut off the current."

On the other hand, it is important to know that under certain circumstances an electric company is not liable in damages for injuries or death of firemen as a result of failure to turn off electric current.

For example, in Pennebaker vs. San Joaquin Light & Power Company, 158 Cal. 579, an electric company failed to turn off electric current in wires required to supply light in the district in which a fire was raging at night time. In holding that there was no duty to a fireman to cut off the power supplying lights to a city district, because of notice that a fire had broken out in the district, the Court said:

"It would compel defendant (electric company), upon the one hand, to extinguish all light and power in a district, regardless of the necessity of so doing, or be held liable for any consequences that might follow its failure. It takes no account of the fact that by so doing, in the case of a night fire, a district would be left in complete darkness, and that under such circumstances, following the alarm of fire, panic might ensue in hotels, lodging houses and residences, and that the resulting damage might far exceed that which the extinguishment of the lights was designed to prevent. No such rule of law exists, nor, we take it, will ever exist, and the utmost that will be exacted of lighting companies in this regard is that they shall hold themselves in readiness to cut off the electricity when the necessity arises and they are informed of it by proper authority."

Electric Company Liable to Property Owner

In Bowen & Son vs. Iowa Public Service Company, 35 F. (2d) 616, it was held that a property owner may recover damages from an electric company where a building is destroyed by fire as a result of firemen being unable to spray water on the building because of negligence on the part of the electric company's employes to turn off electric current in the day time. Here it was disclosed that the Citizens' Gas and Electric Company maintained a power line carrying 33,000 volts in close proximity to a factory building which one day was discovered to be on fire.

An alarm was given and the town fire department at once appeared with its fire fighting apparatus and was about to throw water through a hose upon the fire and could have extinguished the fire at that time. However, the town marshal ordered the members of the fire department not to turn on the water, because the wires were so close to the building that the electric current from them would cause the death of firemen using the fire hose if a stream of water passed through it and reached the fire wires.

(*Continued on page* 468)

Where the Coming Event Casts Its Shadow Before

This huge pall of smoke from a brush fire in Marin County, California, tells very clearly the direction the wind is blowing and the extent of the blaze. Before this particular fire was brought under control, 125 homes had been destroyed and over a million dollars worth of damage was done. More than 2,000 volunteers assisted the fire fighters in checking the spread of the blaze.

Brush Fires and Backaches

At No Other Type of Fire Must the Fire Fighters Take Such a Gruelling and Prolonged Punishment—Suggested Methods of Handling the Large Brush Fire

THERE are not many cities in this country which have within their limits large areas covered with grass and brush which would constitute a severe fire problem. But many fire departments, and especially in recent years, render aid to those sections wherein brush fires are burning with the result that it is very necessary for the members of the department to know just how to approach and handle a brush fire.

First, the officer in charge of operations must know exactly what he is about, and what he is doing. There can be no guesses or conjectures. Everything must be worked according to schedule, with a definite objective in view. Unless such a plan is followed in handling a brush fire, there is no telling what the ultimate result will be.

Brush fires vary with atmospheric conditions, time of the year and terrain on which they are burning. A brush fire on level ground in the spring of the year is usually not such a difficult job to handle. On the other hand, a brush fire burning among the hills in the fall of the year, when everything is dry, presents an overwhelming task to the fire fighting forces.

In operating on brush fires chief dependence must be placed on volunteer workers. In fighting fires within the city, apparatus holds a point of equal importance with the personnel; in fighting brush fires, on the other hand, personnel is by far the element of greater importance, and equipment is minor. It is only necessary to mention equipment commonly employed in fighting brush fires to appreciate this: brooms, shovels, axes, hoes, rakes, weed hooks, wet bags, and sometimes extinguishers and small lines of hose.

If the brush fire is small, and no appreciable wind is blowing, it may be readily extinguished by beating out with shovels, wet bags, or brooms designed for brush fires, but if the fire is large in area, if a strong wind is blowing, and if it is burning in a hilly section, then very intelligent and well organized efforts only are of value.

As large brush fires present the chief problem in this particular classification of blazes, they alone will be considered in the following:

The first officer arriving at the scene of the blaze must determine definitely the head, rear and flanks of the fire. Without this knowledge, effective work cannot be done.

Activities are invariably started at the head of the fire, to thus prevent further extension. After the head has been stopped, then the flanks are given attention and finally the rear.

If sufficient men are present, it may be possible to surround the fire completely, but this is not usually the case, for there is usually a dearth of personnel especially in the early stages of the fire when help is most needed.

Assume, in the first example, that no appreciable breeze is blowing and that the fire, though of large area, is not traveling rapidly. In this case, the force will immediately go to the lee of the fire, and will clear a space about a foot wide with the use of shovels, hoes,

Fast Work and Plenty of Men are Needed to Successfully Cope With the Brush Fire

The brush fire shown above swept over a large area in the hills near Hollywood, California, and kept the fire fighting force busy a full afternoon. Although many fine homes were in the path of the blaze, the department did very effective work and made a fine stop before any of the buildings were reached. Here is one of the Hollywood department trucks getting into operation.

or other equipment, baring the ground so that there will be no possibility of the fire burning across this barrier. Immediately thereafter, back firing will commence. This consists of igniting the grass and brush on the fire side

It's Not An Easy Job to Make a Barrier

These volunteers, working at a fire near Estacada, Oregon, found they had plenty of work to open up a clear space through the jungle type of shrubbery shown above. But the barrier had to be made to make sure that the fire did not extend into protected zones.

of the barrier so that such back firing will clear a fairly wide swath across which the main fire on advancing will not cross. If sufficient men are at hand and if conditions are suitable the constructing of the barrier and back-firing should take place close along the face of the advancing fire. But if the advancing heat is too intense, then the barrier will have to be made sufficiently far in advance of the fire to enable the men to operate with safety. The speed of travel of the main fire is the chief factor in back-firing operations. Brush and grass fires will, of course burn much less rapidly against the wind than with the wind. Hence, the head of the fire will advance much more rapidly than will the fire on either flank or at the rear.

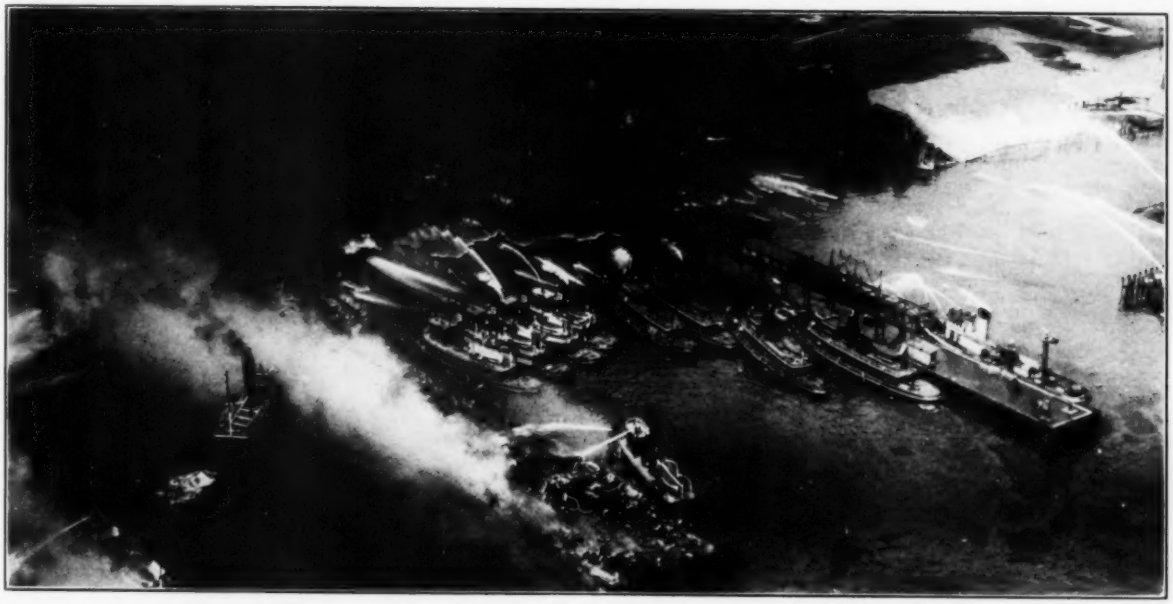
Where heavy wind is blowing, and where embers and sparks are being carried considerable distances, then the construction of the barrier and the back-firing must of necessity take place well in advance of the fire.

Determine the line of defense definitely, after determining the outline, of the advancing fire. Place the men evenly over the line at which the barrier is to be constructed, and get them in operation at once. As soon as the barrier is well under way and there is no danger of back-firing crossing the barrier, then back-firing should be started. Be sure that the barrier shows fresh earth—in other words that there is no grass, leaf mold, or other material across the barrier which will trail the fire from the back-fire side to the unburned side of the barrier. So much for brush fires on level ground.

Where brush fires are burning in hilly sections, the difficulties are multiplied tremendously. The fire will not advance on an even line, but will travel more quickly up the steeper hillsides and up along the ridges toward the higher points. The breeze blowing up the canyon not only drive the fire ahead rapidly but furnishes plenty of oxygen for rapid combustion. Construction of barrier and back-firing will require much greater care in this case and much greater speed.

As before, make a quick survey of the situation and determine the head line of the advancing fire, and also determine the line along which a stand will be made. In this connection, it might be mentioned that the tops

(*Continued on page* 467)



Fireboats and Tugs Attempting to Prevent the Spread of Fire Over a Large Area of the Gulf Refining Co., Bayonne, N. J.

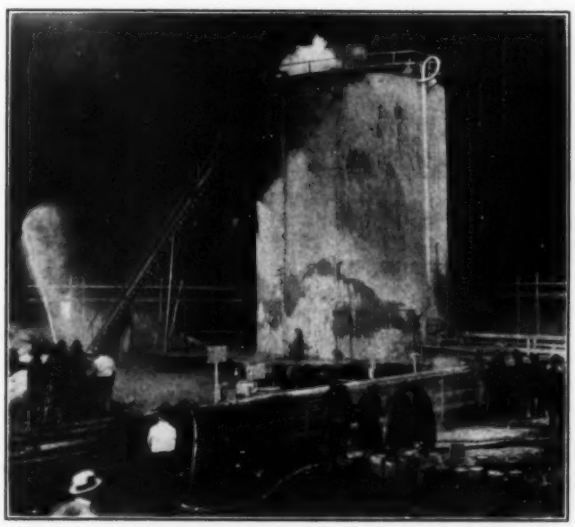
Foam Extinguishes Severe Oil Plant Fire

Powder Rushed from Nearby Refineries and from Foam Powder Manufacturers—New York City Sent Three Fireboats to Help

WHAT is believed to be the worst fire in Bayonne, N. J., within the last nine years, started when a motor tanker backfired at 10:20 a. m., May 8, after taking on board 800 gallons of gasoline at Pier 1 of the Gulf Refining Company at Bayonne. The boat was backing into the Kill van Kull when the incident happened. An explosion occurred and the fire spread to the pier and ran from pool to pool of oil until it reached one hundred drums of high test gasoline. One by one the drums exploded and the gasoline was scattered in all directions.

All of this happened in a short space of time, for when the boat caught on fire, a tug fastened lines to it, and within twenty minutes had hauled the craft away from the pier.

Just adjacent to the piers was the barreling house, the stock house and the oil pump house. These caught on fire and drums of gasoline piled two stories high exploded and in some instances cases were hurled a hundred feet into the air. The plant extends for ten city blocks along the Kill van Kull and is a quarter of a mile deep. More than one hundred tanks containing gasoline, crude oil, and naphtha were in the yards. Adjoining the refinery are the plants of the Standard Oil Company and the Tidewater Oil Company, neither of which suffered. The plant of Babcock & Wilcox, boiler manufacturers, and the homes of the oil workers are nearby.



Foamite Generators in Use at Bayonne Oil Fire

The Gulf Refining Company rushed foam powders to the scene. Aid was also sent from the Standard Oil Company and the Tidewater Oil Company Fire Departments. The Bayonne Fire Department consisting of ten pieces of apparatus and 175 men reached the pier, and for a time could do nothing. A call was sent to New York City and the fireboats John Purroy Mitchel, Zophar Mills and William J. Gaynor were rushed in and fought the flames at close range.

As the fire ate into the warehouse the explosions started, minor at first but sufficient to send burning fragments in all direc-

tions. The next building to go was the locker building in which the workmen store their street clothes. An hour and a half after the start of the blaze Pier 1 was completely destroyed and the flames were rapidly devouring Pier 2. When fire attacked the pump house, matters became serious for there was then no way to empty the group of tanks nearest the flames. Oil company men dug a three-foot trench to prevent the burning liquid from reaching the main yard.

Coast Guard boats and police launches were on duty at the Kill van Kull to divert marine traffic and to prevent floating timbers from floating out into the bay. Plants on Staten Island, less than a mile away from the fire, were in danger and four companies from Staten Island were sent to patrol the shore all afternoon.

On May 10, the heavy coating of foam succeeded in smothering all the flame although a flare of wind late in the day had revived the fire. The new blaze was quickly extinguished. All through Thursday night, twenty-three tugs and fireboats worked at the fire.

The plant after the fire resembled a shelled war sector. The tanks which had exploded stood twisted, scarred and blackened like a forest subjected to continued bombardment. Two piers were in ruins and a third was

All That Was Left of the Large Oil Tanks in Bayonne, N. J.

There were sixteen large tanks full of oil in this section of the Gulf Refining Company plant before the fire. The photograph shows all that remains for the salvage workers.

badly damaged. The skeletons of four buildings remained. Work will be started at once to restore the plant to its full capacity. The oil company is satisfied that the fire was the result of an accident. Chief William McLaughlin of Bayonne will conduct an investigation.

Vast quantities of foam powders were moved into Bayonne to fight the oil fire and to replenish the supplies loaned from nearby plants. In three days' time the American-LaFrance and Foamite Corporation shipped 219,000 pounds of powder, the Pyrene Manufacturing Company 80,000 pounds, The American Fomon Company 87,000 pounds, and the National Foam System 30,000 pounds. In all the fire brought about the movement of 316,000 pounds of powder.

About 12:45 p. m. Thursday, May 8, the Long Island office of the American-LaFrance and Foamite Corporation received a call from the Gulf Refining Company asking for an immediate shipment of five hundred cans of powder. The powder and experienced men were rushed at once. The chief engineer of the Foamite Division left Elmira, N. Y., for Bayonne to give all assistance possible.

Orders came in at the Long Island office for large amounts of powder to replace that loaned to the Gulf Refining Company by neighboring oil companies. At two o'clock that afternoon a call was sent to the main factory for a carload of powder. An express car was located near Elmira and connected to an express train which moved it in. Meanwhile 33,000 pounds of powder were loaded on trucks and taken to the station. Eleven minutes after the car arrived, it was loaded. The shipment reached Jersey City at 12:10 a.m. and was unloaded in sixteen minutes. In all, eleven hours after the call was received, the powder was in Bayonne. Another car was loaded with 30,000 pounds of powder and attached to a fast freight train that arrived in Jersey City at 3 a. m. Friday.

At 11 p. m. Thursday another call was sent for an additional carload. Executives and employees in Elmira were quickly rounded up and a third carload left at 12:45 a. m. Friday. This shipment of 46,000 pounds arrived in Jersey City at 8 o'clock Friday morning.

A fourth carload was loaded into an express car at Elmira at 7:45 a.m., Friday, and arrived in Jersey City at 3:30 that afternoon. In response to a call received at ten o'clock 48,000 pounds of powder, most of which was located at the experimental station three miles distant, was loaded into a car and dispatched at 1:14 a. m. Saturday morning. Three more shipments were rushed —10,000 pounds by truck on Saturday afternoon, 13,000 pounds by express early Sunday morning and 6,000 pounds on Sunday afternoon. In all 219,000 pounds of powder were sent from Elmira in three days' time.

The American Fomon Company rushed 40,000 pounds of powder directly from their plant at Paulsboro, N. J., to the Gulf Refining Company on May 8, and on the same day furnished 47,000 pounds to the Standard Oil Company of New York, Tidewater Oil Company and the National Biscuit Company to replace chemicals that were sent over to Bayonne the day of fire. The call for powder did not come until 3:30 p.m. Within one hour trucks were loaded and the powder moved to Bayonne. To expedite the shipment, special signs were painted and hung on the sides of the trucks so that they would have a clear road from Paulsboro to Bayonne.

On the afternoon of May 8 a call was also sent to the Pyrene Manufacturing Company, for foam powder. They shipped all that they had in stock and opened the factory in the evening to compound fresh powder as fast as possible. As soon as this powder was made up it was put on waiting trucks and shipped to Bayonne. A steady flow of powder was shipped throughout the night of May 8 and during the following day. In all 80,000 pounds were shipped.

The National Foam System, Inc., of Philadelphia shipped 30,000 pounds of powder to Bayonne.

As a result of this fire more than one hundred persons received minor injuries and four remained in a hospital for further treatment. More than 6,000,000 gallons of crude oil and gasoline were destroyed in a fire that caused damage estimated at $3,000,000. Just as householders were preparing to leave their homes in Bayonne, the wind shifted and prevented more serious damage.

It is felt by many interested in fire department matters that the fire demonstrated the possibilities of portable foam equipment.

Oklahoma Firemen to Meet in June—The Oklahoma State Firemen's Association will meet in Tulsa, June 2-4. A. B. Corkille is chairman of the local committee.

Pumper Ordered for Gloucester, Mass.—A Maxim 600-gallon pumper has been ordered for Gloucester, Mass. It will be housed in the Magoolia station.

THE ROUND TABLE

For Practical Discussion of Current Fire Department and Fire Management Problems

ON the facade of the New York general post office is the motto: "Neither snow nor rain nor heat nor the gloom of night stays these couriers from the swift completion of their appointed rounds."

How expressive that is of the fire department—ready to give service at all hours! That is why when first aid assistance is required on drowning cases, where persons have been subjected to electrical shock or gas victims have to be revived, the fire department is called.

Not every town has ambulance service, and often in times of emergency the doctor is out of his office. Trained assistance must be secured in a hurry. In many communities the people have learned to rely on the fire service which is ready to answer calls twenty-four hours of the day, regardless of the elements, and with the least possible delay. The inhalator is placed in a fire station where there is always a trained crew of operators for emergency work.

The question that is treated in this issue appears in the box on this page. In the box on the following page is the problem that will be treated in the next issue. Should you have some comment that you would like to make on the next problem or if you have a question that you would like to see treated in this department, write to the "Round Table Editor," FIRE ENGINEERING, 24 W. 40th St., New York, N. Y. This service is absolutely free to all readers.

HERE IS THE PROBLEM

What department in your city handles inhalator cases?

In case of accident, is the fire department or the hospital called?

Do you have a regularly trained first aid crew to handle city cases?

The Question

Studying the replies received, it is evident that the value of placing an inhalator in some fire station and having a crew on hand at all times trained in its operation, is fully appreciated. In a few cities first aid work is delegated to the police department. The letters received follow:

John H. Espey, Chief, Elmira, N. Y.: A fully equipped inhalator squad is maintained by the Elmira Fire Department and is the only emergency unit of its kind in that city.

The public has become practically educated to the value of this squad and almost invariably cases of drowning, electrical shock, gas poisoning and so forth are immediately reported to fire headquarters. The squad of the particular shift on duty responds. The equipment consists of an HH Inhalator, blankets, hot pads and first aid kit. Reserve carbogen cylinders are carried by the squad and a large charging is maintained at headquarters.

As a part of the regular fire department training, classes in first aid, artificial respiration and the use of the inhalator and equipment are held weekly. Every man becomes familiar with this important work and is qualified to fill any vacancy in the squads selected for such practice. Out of twenty-eight cases handled since the unit was established, six were unnecessary, ten cases were futile, while twelve were successful. The total number of victims worked on were twenty-nine.

John C. Moran, Chief, Hartford, Conn.: The fire department, Hartford Gas Co., and Hartford Hospital have the only inhalators that I know of in this city.

The fire department and also the gas company respond to inhalator cases as the hospital has no ambulance.

All of the members of companies located at fire department headquarters where the inhalator is located (about thirty men) are familiar with the operation of the apparatus. We have had several calls for the inhalator, which is generally used in connection with the Prone Method of resuscitation. One of the cases was where a man had been buried in a pile of soft coal for about forty minutes, and he was brought to before he was sent to a hospital where he totally recovered in a few days.

Frank W. Fuller, Chief, Brainerd, Minn.: The fire department handles inhalator cases and all paid men and some of the volunteer department are instructed in first aid. Usually all emergency calls are turned over to the fire department.

It is my opinion that the fire department is the one best fitted to handle almost any emergency as they are better able to respond with equipment for any emergency, and they are also trained and more than willing to be of service at any time.

Wm. D. Horne, Chief, Millbury, Mass.: The fire department has in a number of cases handled inhalator cases. If the department can be of any service in time of accident, it is called, and that is very often. We are called for all drowning cases, cases of electrical shock, and so forth.

We have a first aid kit and do the best we can. We have had instructions in the Prone Method of resuscitation.

F. F. Henryson, Chief, Elgin, Ill.: The fire department handles inhalator cases in the city and we also send the inhalator to points outside the city. In case of accident, it is the fire department that is called.

All members are trained in the use of the inhalator and in first aid work. We have had very good success. The Western United Gas and Electric Company of our city also have an inhalator and a trained crew. They work together with the fire department on cases requiring more than one inhalator. Every department should have one unit or more. Our inhalator is used on members of the department who complain of severe headaches following basement fires, and the treatment has brought relief.

Daniel H. Shire, Chief, Mason City, Ia.: Inhalator cases are handled by the fire department.

The fire department is called first and then doctors and ambulances. We are making a campaign to educate the people to call the fire department first and the doctors next for the reason that they can get the fire department on first call while the doctor may be away at the moment or it may be some time before he arrives. The fire department can be on the spot to give first aid until the doctor arrives.

We have a crew holding certificates in standard and senior first aid courses of the American Red Cross and they have to complete one hour of drill every week. These men wear the Red Cross first aid emblem on their right sleeve, six inches from the shoulder. The crew consists of a lieutenant and four firemen on each shift. The crew is provided with a first aid kit, Burrell All Service Mask, HH Inhalator, stretchers, and so forth. I find the first aid service well worth while and it is doing the department a great deal of good.

Owen C. Dunn, Chief, St. Paul, Minn.: In our city first aid calls are responded to by the Bureau of Police. Police department doctors are on duty at all times; one responds to all emergency calls with an ambudance equipped for first aid purposes.

We have seventy men in the fire department who are qualified Red Cross instructors. Some of these men are now conducting classes in first aid.

We carry small first aid kits on some of our apparatus and frequently our firemen perform first aid service to those injured at or about fires. For the past two years my recommendations have contained a request for a fire department rescue squad and this will, no doubt, be installed as soon as funds are available.

C. E. Underwood, Chief, Manistique, Mich.: The fire department answers all inhalator calls.

In case of accidents, the fire department is called as well as the hospital and ambulance. The firemen are all trained in first aid work and handle all cases of this nature.

We also have a Junior Police and Fire Department consisting of twenty-two boys from eleven to fourteen years old who receive regular training in police and fire department work. In this work they are taught first aid work and manual respiration.

Louis Craig, Chief, Kokomo, Ind.: The fire department is the only city department that is equipped with an inhalator and we would be called upon for assistance in such cases.

In case of accident the fire department would be called, if an inhalator is needed. All members of our department are being trained to handle city cases. Nearly all of our larger industries are equipped with one or more inhalators.

J. E. Taplin, Chief, Blackell, Okla.: The fire department for the past ten years has had charge of a lungmotor. In that time not more than a half dozen calls have been received. An inhalator has recently been added to our equipment and we believe will be much more useful. In the past few years the department has been called to administer oxygen in pneumonia cases and the inhalator has been very efficient for that work.

This department does not have a regular first aid crew, being trained only in the use of the inhalator. The men respond to such calls where training will be of benefit to the public.

F. H. Grabner, Chief, Baker, Ore.: No department in the city has anything to do with inhalator cases. But the light and power company has such a unit and a very competent person to operate it.

Either the hospital or clinic gets accident cases—the ambulance rushes the victims to one or the other.

All of the paid firemen have taken courses in first aid but are seldom called on for work outside of the department.

Clyde H. Pritchard, Chief, Jackson, Mich.: The fire department handles inhalator cases. In case of accident, the fire department is called only for inhalator cases. We have regularly trained men. The city and county fire departments go anywhere in Jackson county with the inhalator.

Julius Marker, Chief, Idaho Falls, Ida.: Inhalator cases are handled by the fire department while in case of accident, the police department is called. We have a regularly trained crew to handle city cases.

Joseph Fifusek, Chief, Traverse City, Mich.: The fire department handles inhalator cases and is called on in case of accident.

We have the old style pullmotor but we never use it unless ordered to do so by a doctor. The men are all trained in first aid work as we have had a number of calls to revive persons overcome by gas and we have also had a number of drowning cases. The men must be ready at all times.

Frank Clark, Chief Belvidere, Ill.: The fire department handles inhalator cases. The firemen attend all cases where such equipment is needed.

Albert Chamberlain, Chief, Hillside, N. J.: We have an inhalator that is carried on our hose wagon and which responds to all alarms. The men are all drilled in its use and I believe that they form a very necessary division in present day fire fighting.

Charles Otterson, Chief, Napa, Cal.: The fire department responds in case of accident and handles inhalator cases. We have no regularly trained first aid crew.

Emil Johnson, Chief, Boulder, Col.: Inhalator cases are handled by the fire department and Public Service Company. In case of accident, both are called. All members of the department and the Public Service Company are trained in this class of work.

Wm. Brosman, Chief, Albany, Ga.: Both fire department and the hospital handle inhalator cases. In case of accident, the fire department is called. We have a regularly trained first aid crew.

James Craney, Chief, Missoula, Mont.: Such cases are handled by the fire department while in case of accident, the hospital is called. Every member of the fire department is trained in first aid work.

Andrew Erdman, Chief, Owatonna, Minn.: There is no inhalator in town. In case of accident the hospital is called. There are three men in the department who are proficient in first aid work.

W. C. Watters, Chief, Oak Park, Ill.: The fire department handles all inhalator cases while the police department handles accidents—the fire department is called only when the need arises. We have a trained inhalator squad on each shift.

B. J. Houston, Chief, Cincinnati, Ohio: We handle inhalator cases, and in case of accident, either the fire department or the hospital is called. We have a trained first aid crew.

Louis Almgren, Chief, San Diego, Cal.: At fires, the fire department is called while in other cases the police ambulance. City accident cases are handled by the police department and Emergency Hospital. All firemen are trained in first aid and perform emergency first aid work at fires only.

D. B. Copeland, Chief, Columbus, Ga.: Inhalator cases are handled by the city hospital. They also respond for personal accidents. We do not have a regular trained crew.

A. E. Henry, Chief, Prescott, Ariz.: We have an E and J Inhalator and Resuscitator, and it is handled only by the fire department.

The fire department responds in time of accident. There is a crew of six men trained in this work.

H. Abbot Griffen, Chief, White Plains, N. Y.: The fire department handles inhalator cases. In case of accident, the fire department and the hospital ambulance are called. We have a trained first aid crew to handle city cases. In 1929 we had five drowning cases with two deaths, and have had two gas cases, March, 1930. The gas victims had been subjected to the gas for eleven hours. One person lived eight days and the other is still in the hospital.

J. C. Sullivan, Chief, Lowell, Mass.: Inhalator cases are handled by the fire department, police department, gas

(*Continued on page* 459)

HERE IS THE PROBLEM FOR THE NEXT ISSUE

Have you tried selling shares to property owners when purchasing apparatus for rural protection?

Has the plan been successful?

What has been some of the difficulties in putting such a plan into effect?

With the Editor

Attend the Winnipeg Convention

The eyes of fire chiefs throughout the country are now being turned toward the city of Winnipeg and the annual convention of the International Association of Fire Chiefs. While that event does not occur until September, it is, nevertheless, none too early for the Chief of the Fire Department to begin making his plans to attend. In some cases this trip will constitute the vacation of the head of the department, and he must needs arrange his affairs and those of his department in advance, so that there will be no hitch in the proceedings.

There can be no doubt as to the need, from a practical standpoint, for the Chief to be present at this convention. In fact, it should be considered, and is by an increasing number of cities, as part of the routine work of the fire chief. He is distinctly on the business of his department in attending the gathering and representing his city in the national convention of his associates in the fire-fighting field.

If a chief were to go to another city to witness the demonstration of a new type of apparatus or method of fire extinguishment, the city would undoubtedly pay his expenses on such a trip. Why then should there be any hesitation in seeing to it that the Chief is present at a gathering at which not only all most modern types of fire apparatus and fire appliances are exhibited and demonstrated, but also all of the up-to-the-minute methods of fire prevention and fire fighting are considered? How can either the fire chief or his city afford to have him miss such an event?

Besides all this, there is that other great advantage that such a convention represents. This is the opportunity to come into personal touch with all of the other chiefs of the country and to get a thorough understanding of their points of view and attitude toward the great fire-fighting questions of the hour. This alone is well worth to the city the expense incident to sending the Chief to the convention.

Work Among the Boys

A movement which of late has received great impetus throughout the country is that which contemplates the education in matters of fire prevention and fire fighting of the boys and girls of the communities. This includes the utilization of organizations of the type of the Boy and Girl Scouts, and also intensive campaigns among the pupils of the schools—public and private.

In several cities the idea of a Junior Fire Department has been found of great help in this respect. In Chicago, for instance, a strong Junior Department has been formed and the youngsters have shown a keen interest in its development. To join, the boys receive, on application at the nearest fire station to their homes, a blank to be filled in. On becoming members, they are encouraged to assist in cleaning up their homes and in persuading their neighbors to observe all the rules of fire prevention and fire safety. They are considered as a part of the Fire Department, and are instructed to do everything possible to cut down the number of fires in the city, and to assist the municipal Fire Department in every legitimate way possible.

Probably the most important feature of this junior work is the interest it creates in the young mind in the matter of safety from fire. The present youth is the future man and here the old proverb applies with unusual force: "As the twig is bent so the tree inclines." If the idea of fire prevention is implanted firmly in the mind of the present day youth and he or she is led to think clearly along fire safety lines, the problem will be well nigh solved.

Another important feature of this matter of instructing the growing boy in fire matters is the probability that among the youths whose enthusiasm is enlisted in the work will be many to whom the life of a fire fighter will strongly appeal. This will mean that the future ranks of the fire departments will be recruited by a number of members who not only have followed the profession from their youth, but who also have joined the senior department from a sheer love of the work. The psychological importance of such an attitude among the members of a fire department can hardly be overestimated.

The Matter of Fire Salvage

The opposition to the idea that salvage at fires is distinctly a fire department function is disappearing, as the subject is becoming better understood. One reason for this is the modern practice among professional fire fighters of extinguishing the fire with the least possible damage, not only by the fire itself, but also through the medium used to extinguish the blaze.

Time was when the procedure was to drown out the fire at the outset by the use of as great a volume of water as possible, and without any consideration of the damage inflicted in the process, or the quality or value of the goods endangered thereby. The fireman's job was to put out the fire and he must do it the quickest and easiest way possible.

This has been all changed by modern and more scien-

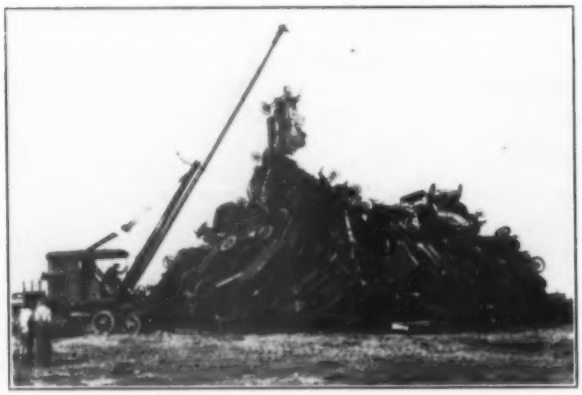
tific methods. It has been found that it is just as easy to control an incipient fire with a chemical or light stream, as with a heavy one, with its consequent severe water damage, often greater than that by the fire itself. Consequent upon this improvement in the method of fire fighting comes that other thought. If it is worth while for the fire department to cause as little damage to the contents of a building as possible, in fighting the fire, why not go a step further and train the firemen to protect such contents, so as to reduce the damage to a minimum? This work has, to be sure, been done, heretofore, by insurance fire patrols, in larger cities, but it is becoming recognized that such work is a departmental function, and should be thus performed.

Naturally, in the larger municipalities, with many fires to engage the attention of the department, the regular fire-fighting corps could not do justice to the work of salvage. In such cases specially trained men, with apparatus designed for the work, are assigned to the protection of the contents of buildings on fire. Such apparatus arrives on the first alarm and its duties, besides that of salvage, often include that of rescue and first aid. Thus the regular assignment of apparatus are relieved from such work to a certain extent, and the efficiency of the department is greatly increased.

It is hardly necessary to point out that the salvage works of such a corps would prove invaluable in reducing losses from water damage to goods in mercantile establishments and to household goods in residences. A body of trained men arriving in the early stages of a fire who devote their entire attention to covering the goods of the establishment on fire so that they will escape water damage should be of great service.

No doubt, as time goes on and the value of such units is recognized the practice of the establishment of salvage-rescue corps will become a regular fire department procedure.

Mansfield, Mass., to Erect Fire House—Mansfield, Mass., has voted to erect a fire station at a cost of $50,000.



An Answer to a Perplexing City Problem

Every municipal official is faced with the problem of what to do with the ancient and dilapidated automobiles. In Long Beach, Cal., an automobile safety committee heaped over two hundred cars in one huge pile, poured three hundred gallons of crude oil on the cars and reduced the vehicles to a pile of ashes. The cars were all in running order and went to the funeral pyre under their own power. The committee is after more unsafe cars that are on the highways.

Program of Oklahoma State Meeting

The thirty-sixth annual convention of the Oklahoma State Firemen's Association will be held in Tulsa at the Tulsa Hotel, June 2-4. The following program has been arranged:

Monday, June 2

8:30 a. m.—Registration.
All delegates, members and visitors will register with Secretary on Mezzanine Floor, Tulsa Hotel. Each will receive badge and program.

11:00 a. m.—Opening Session.
Invocation—Reverend Kerr.
Address of Welcome—Mayor George Watkins.
Response—Chief E. H. Miller, McAllister.
Fraternal Welcome—Fire Commissioner T. I. Munroe.
President's Address. Appointment of Committees. Adjournment.

Monday Afternoon, June 2

1:30 p. m.—Business Session.
Roll Call.
Discussion.
Address, History of Fire Departments—Richard Lloyd Jones, Tulsa, Oklahoma.
3:30 p. m.—Official Convention Picture.
4:00 p. m.—Memorial Service—Boston Avenue M. E. Church.
5:30 p. m.—Auto Trip.
6:45 p. m.—Local Entertainment.

Tuesday Morning, June 3

9:00 a. m.—Business Session.
Roll Call.
Reading of the minutes of Executive Board, relative to Training School Plans.
Report of School Committee—Chief Taplin, Blackwell.
Address, "Overhauling"—Chief Goff, Oklahoma City.
12:00 Noon—Chief Club Luncheon.

Tuesday Afternoon, June 3

1:30 p. m.—Departmental Meetings.
a. Master Mechanics.
b. Company Officers.
c. Fire Alarm Superintendent, Operators and Electricians.
d. Chiefs will hold their meeting immediately after luncheon.
(Each meeting will select Chairman and Secretary. Secretary will make notes of proceedings for publication in the Year Book.)
2:15 p. m.—Business Session.
General Discussion of Subjects brought up in Departmental Meetings.
Address, "Arson"—Geo. W. Smith, Detroit, Mich.
Needed Legislation. Adjournment.
7:00 p. m.—Dinner Dance. Topaz Room, Hotel Tulsa.

Wednesday Morning, June 4

9:00 a. m.—Modern Fire Drill. Capt. Jennings, Tulsa.
10:00 a. m.—Carbon Dioxide Extinguisher Demonstration.
11:00 a. m.—Ride, Sightseeing.
Entertainment and Lunch by Sapulpa Fire Department.

Wednesday Afternoon, June 4

(Topaz Room, Tulsa Hotel)
2:00 p. m.—Business Session.
Assessment of Fines for non-attendance.
Committee Reports, discussion and action.
Report of Officers.
Unfinished Business.
New Business.
Selection of Place for next Convention.
Election of Officers.
Installation of Officers.
Appointment of Standing Committees.
Final Adjournment.

Quarterly School Planned for Oklahoma

Under the auspices of the Oklahoma State Firemen's Association plans have been made for quarterly fire schools to enable small departments to receive the latest ideas in fire department work.

It is hoped that each fire department in the state will send a representative to the school who will later act as instructor in his local department. The quarterly school will last but a few days.

When the local instructor reaches home for work with the volunteer firemen, he will have subject matter and full directions for weekly drills printed in lesson form. Sufficient copies will be provided so that each fireman will receive one.

The goal of enrollment has been set at fifty cities. According to the size of the city the charge will be $25, $50, $75 or $100, and the fees received will be used to defray the administrative expenses. The only expense of the men at the school will be transportation and meals. No charge will be made for lodging.

The Oklahoma State Firemen's Association is composed of 141 departments in the state. The enrollment of cities for the school will be completed at the state convention in Tulsa, June 2-4. Chief J. E. Taplin, Blackwell, Okla., is in charge of the school.

Questions and Answers

NOTE—Readers are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified

Pumping Gritty Matter

To the Editor:

Kindly advise me on the following:

At this institution we have a 750 gallon pumper. The machine is almost new, about three years old. Sometimes this truck is used to pump out sewers, basements and wells. I do not approve of doing this kind of work with a rotary pump; also, all this foreign material passing through the cooling system of the motor certainly does no good—and there are certainly quantities of dirt passing through the pump and cooling system when it is in operation draining out basements, sewers and wells. Am I right in opposing this practice?

M. G.

Answer: You are certainly right!

Fire pumps, give best service when operating under those conditions for which they are designed—namely, pumping clear water.

To use a high class fire pump to drain sewers, basements, etc., is only inviting trouble. Fine particles of sand and grit drawn through the pump are bound to leave their marks behind them.

If your authorities want to put in a new pump every two or three years, they are certainly following the best policy to make this necessary. Motor pumping engines of present day design are very dependable, and very efficient. But they are not made for such service as you have described. It is unfair to the machine to put it to such a task, and still less fair to the manufacturers of the apparatus. They will be the ones who will be blamed when the pump begins to show signs of premature trouble. If you want to get the best service from pumps, use them only for the service for which they are designed—namely, delivering clean water. Of course, there are occasional emergencies where a pump might be used in such work as you describe, but the urgency must be such as to warrant overlooking cost of repairs or replacements.

Finding Nozzle Pressure on Chemical Line

Below is a solution of a problem which I have worked out, involving a chemical line with small nozzle.

This layout was made at a small closet fire on the second floor of a three story, third class dwelling house.

The alarm was received at 8:17 p. m. from a box, and our company responded with one engine, followed by a ladder company. Upon arrival at the fire, we ran the chemical line to the second floor. Meanwhile the wagon driver charged the tank, which lasted about 7 minutes.

The officer in charge directed the engineer to run a 2½" line from the post hydrant and connect same to the chemical tank connection and open hydrant fully. The tank valve was not closed so the water filled the chemical tank, registering a pressure on the gauge of 150 pounds.

In Boston, all chemical hose connected to a tank is understood to represent 250 feet of ¾" hose, and is equipped with a chemical play pipe having a ⅜" nozzle.

By the above arrangement, water passed into and through the chemical tank and hose, and saved considerable water damage, which would likely have resulted had a 2½" line been employed. In the solution which I have worked out I am not allowing for the back pressure, as the line is elevated only one story.

Solution: K for ⅜" tip on a 2½" line is .001985

The factor for reducing ¾" hose to 2½" hose is .0029

250 ÷ .0029 = 86,206 feet of 2½" hose. This is equivalent to 1724.14 sections of 50 feet each. In other words "L" employed in the formula would be 1,724.14

N.P. = E.P. ÷ (1.1 + K.L.)

"L" is, as given above, 1724.14

"K" is .001985

Then N.P. = E.P. ÷ (1.1 + 3.422)

Equals 150 ÷ 4.522 = 33.17 pounds approximately

The discharge is found by the usual formula, namely, discharge = 30 x d x d x $\sqrt{P}$ where d is the nozzle diameter in inches and P is the pressure in pounds at the nozzle.

Discharge = 30 x .375 x .375 x $\sqrt{33.17}$

Equals 30 x .375 x .375 x 5.76

Equals 24.35 gallons per minute approximately.

Friction is found by formula:

Friction loss (100 feet of 2½" hose) = 2 x Q x Q + Q, where Q is the flow in hundreds of gallons per minute.

Q = .243

Then friction loss in 100 feet of 2½" hose = 2 x .243 x .243 + .243 or .361 pounds per 100 feet.

The length of the line is equivalent to 86,207 feet of 2½" hose, or 862 x .361 to get the friction loss in the line.

This equals 311.2 pounds.

Multiply this by the factor for ¾" line which is .0029 and we get .902, or approximately .9 pounds friction loss through the 250 feet of ¾" chemical hose.

Is the above solution for nozzle pressure, discharge and friction loss correct?

J. H.

Answer: Your solution is entirely correct with the exception of the last couple of steps.

In solving for friction loss, where the flow is less than 100 gallons per minute, the formula is: Friction loss for 100 ft. of 2½" hose = 2 x Q x Q + ½Q.

This would give the friction loss in the 250 foot line of chemical hose as 206 pounds approximately.

It is incorrect to multiply the friction loss found by formula by the factor for ¾" hose as you have done.

The figure you secure for friction loss by the method above should give you the answer. It is unnecessary to make any further calculations. But you will note the figure for friction loss, 206 pounds, is more than the engine pressure. This is due to the fact that in small diameter hose lines only approximate results can be secured by the use of formulas. The simplest way of finding friction loss in such a problem is to deduct the nozzle pressure from the engine pressure, after making a correction for difference in elevation of nozzle and engine. This will give you very nearly correct results.

Laying Hose and Rural Apparatus

To the Editor:

Will you kindly answer the following questions through your columns:

1. Which is the better way to lay hose at a fire from a triple combination truck—from the hydrant to the fire or from the fire to the hydrant, and why?

2. What kind of apparatus and equipment would it be advisable to purchase to be used for rural calls so as to leave our present truck in town in case of a call while in the country?

B. E. S.

Answer: 1. This depends upon the location of hydrant and fire, as well as the direction from which the truck is rolling to the fire. In this connection it is assumed that the truck has a divided body and is able to lay hose either way—that is, has hose placed both ways so that either the male end or female end of the line can be stretched off.

Where the truck is rolling into a fire and must pass the fire to reach a hydrant, it is best to stretch from the fire to the hydrant. On the other hand, where the truck passes the hydrant on the way to the fire, it is probably better to stretch to the fire, and then return the truck to the hydrant to get in position for operation.

Where but a single body is provided, the usual practice is to stretch from the hydrant to the fire.

Answer: 2. For rural calls either a chemical engine or a small pumper with booster tank would be the type of equipment most suitable.

There seems to be a growing tendency to use the small booster pump with booster tank for rural sections. Higher pressures, and greater discharge, without interruption for charging tanks, have influenced many departments to put in such apparatus. On the other hand, where chemical apparatus is provided with a bank of tanks, then one tank can be charged while the other is being discharged, eliminating interruption.

FIRST ANNUAL SHORT COURSE FOR FIREMEN HELD IN TEXAS

Petition Sent to Legislature to Provide a School of Firemenship at the State College —Feature Lecture on Chemistry of Fire

MORE than 200 firemen attended the first annual short course for firemen, under the direction of H. R. Brayton, Professor of Inorganic Chemistry, A. & M. College, College Station, Texas. Seventy-five cities were represented and the work offered proved very profitable and instructive, especially to smaller city firemen.

The success of the school resulted largely from the wonderful cooperation of the Bryan Fire Department. Bryan, a city of 9,000 population, is situated about five miles from College Station, and, like most small cities of that state, must depend upon volunteers for fire protection. Its fire department consists of two paid men, and twenty-one volunteers, and is equipped with two 750-gallon pumpers, one hose and chemical, and a ladder service truck.

In the school, one lecture period was devoted to "The Organization and Discipline of a Paid and Part Paid Fire Department." In this address the importance of a running card, and the necessity of adopting some such prearranged plan of procedure, was strongly stressed. The instructor and the Chief made an analysis of conditions affecting response to fires, from which, a running card, or order of procedure was worked out, and adopted. This provided for a systematic layout of all the city's fire protection equipment.

On the last day of the school a demonstration of the new procedure was given. With the volunteers at their customary employment, and with only two drivers on duty, three hydrant streams and two pump streams were placed in service. One 2½" line was siamesed into two 1½" lines each with a ¾" tip, hence only four 2½" lines were laid. The time, taken from the ringing of the telephone alarm, until the five streams were in operation, was two minutes and forty-three seconds. Chief Greisser, of Bryan, estimated, that seven or eight minutes would have been necessary under the old running card. Needless to say, the fire department is highly elated with the new plan.

The feature lecture of the school was "Chemistry of Fire and Fire Fighting, and Special Fire Hazards," by Prof. H. R. Brayton.

At the close of the school, a resolution was unanimously adopted, petitioning the Legislature to pass a law providing for the establishment of a School of Firemanship, in connection with the A. & M. College of Texas, and to provide the necessary appropriations for buildings, and equipment suitable for that purpose. It was pointed out that such a department would not only be a great asset from a fire protection standpoint for the college, but would provide headquarters for an all year round program of instruction for Texas firemen.

The program follows:

Monday, May 5

8 a. m.—Registration.
9 a. m.—Cooperation Between Water Works, Police Department and Fire Department, Supt. Public Utilities, I. E. Warren, Bryan, Texas.
9:45 a. m.—The Fireman's Part in Fire Prevention, H. Oram Smith, Chief Engineer, Texas Inspection Bureau.
10:45 a. m.—Organization and Discipline in Departments Using Paid and Part Paid Firemen, J. E. Taplin, Director, Oklahoma Firemen's Training School.
12 Noon—Lunch and Entertainment, Courtesy Bryan Fire Department.
1 p. m.—Treatment of Minor Injuries, C. T. Sprague, Trainer A. & M. Athletic Teams.
2:15 p. m.—Drill Evolutions and Company Team Work, Deputy Chief J. J. Lynn, Drill Master, Oklahoma City Fire Department.
Fire Department Signals.
Tying Standard Knots.
Use of minor tools and equipment.
Raising ladders, the ladder splice, bridging ladders.
Lay line to roof of seven story building, set pump and give pressure of 150 pounds. Lower line and note increase of pressure at each lower story.
Lay 200-foot line and replace bursted section using proper tools.
Lay two lines of hose from fire to hydrant, set pump and convert to master stream, using proper tools.
5:30 p. m.—Demonstration of Inhalator, and Prone Pressure Methods of Resuscitation, and Demonstrations of Gas Masks—Mr. Gruber, Mine Safety Appliance Co. (With assistance of Mr. Brayton a room was filled with smoke and a practical demonstration was made.)
7 p. m.—Exhibition of Fire Prevention Pictures.
9 p. m.—Round Table Discussions.

Tuesday, May 6.

8:30 a. m.—Chemistry of Fires and Fire Fighting, and Special Fire Hazards—H. R. Brayton, Professor Inorganic Chemistry, A. & M. College of Texas.
10 a. m.—The Fire Department Training School.
How to Organize a Department Training School, J. E. Taplin, Blackwell, Oklahoma.
(Note, this was followed by statements from Asst. Chief Kohlman, Houston, Texas; Asst. Chief Wolfe, Dallas, Texas; Chief Enright of Port Arthur; and Chief Parker of San Angelo, telling of their drill schools.)
Developing Salvage Work in the Fire Department—Asst. Chief Wolfe, Dallas, Texas.
Visual Instruction in Training Firemen—Asst. Chief Luckey, Austin, Texas.
12 Noon—Lunch, Courtesy A. & M. College.
1:30 p. m.—First aid in Major Injuries—Dr. J. E. Marsh, College Physician.
2:15 p. m.—Fire Fighting Methods.
First Defense, J. E. Taplin, Blackwell, Oklahoma.
Ventilation, J. J. Lynn, Oklahoma City, Oklahoma.
The Control and Extinguishment of Large Fires and the Value of Adequate Fire Streams, Asst. Chief Kohlman, Houston, Texas.
Discussion, "My most important fire, how fought, and the lessons it taught"—by fire chiefs and others.
4 p. m.—Demonstration of Running Card, as outlined in lecture by J. E. Taplin, by the Bryan Fire Department.
5:30 p. m.—Demonstration of Various Types of Fire Extinguishers, by various manufacturers.
8 p. m.—Round Table Discussions.

On Wednesday there was a meeting of the East Texas Firemen's Association, with a parade. In the afternoon there were races and an exhibition drill.

Railroad Locomotives Used to Fight Fires

Switch engines of the Chicago, Milwaukee, St. Paul and Pacific Railroad, Chicago, were used in a test to fight fires along the railroad right of way. High pressure hose lines were fed from the locomotive tanks.

Lowell Receives 1,000-Gallon Pumpers—An Ahrens-Fox 1,000-gallon pumper has been delivered to Lowell, Mass.

WIND AND FLYING BRANDS SPREAD FIRES IN NASHUA

Aid Rushed From Nearby Municipalities—National Guard Called Out—Refreshments Furnished Fire Fighters by Salvation Army

By HARRY BELKNAP

FLYING embers, dry brush and grass, and wooden shingle roofs coupled with a 40-mile an hour wind, spread destruction over a wide area in Nashua, N. H., on May 4, when a fire which started beneath an old railroad bridge leaped beyond control and developed into a conflagration.

Lumber yards, factories, and dwellings furnished fuel for the flames which leveled 260 buildings and left more than a

Over 1,000 Persons Made Homeless in Nashua, N. H.

Airplane view of the conflagration which spread over a wide area, destroying factories, lumber yards and homes. The flames were spread by a 40-mile wind and flying embers.

thousand persons homeless. The total damage was estimated at $4,000,000.

Among the buildings destroyed were the following: Proctor Brothers' cooperage plant including fifteen buildings and more than one mile of stacked boards; the White Mountain Ice Cream Freezer Company, two buildings one of which was a 4-story brick structure containing several thousand freezers; American Box and Lumber Company, three small buildings and one and a quarter miles of stacked pine lumber; the Robert Swart lumber yard; Church of the Infant Jesus; Infant Jesus parochial school; Convent of the Church of the Infant Jesus; rectory of the same church; Nashua Saddlery Company; Nashua Building Company, Crown Hill Baptist Church and parsonage; and the Hill Coal Company.

Chief James E. Smith, of the Nashua Fire Department, gave the following account of the origin and spread of the fire:

"Fanned by a strong northwesterly wind the fire swept through the city, along a southerly line into the eastern section, destroying dwellings and several plants. When the first alarm was sounded shortly after two o'clock the Boston & Maine Railroad bridge on the Keene Branch was burning briskly. Lines of hose were laid on Canal Street and on East Pearl Street, as the wind was blowing strongly and sparks were flying. A garage on Temple Street was burning fiercely. Sparks flying ignited the roof of the house on the corner of South and Pearl Streets. Another house in White Court ignited. For a time it appeared as though the firemen might isolate the fire section but the flames were of mushroom growth and the fire area spread rapidly and viciously.

"Along Worcester Street, Spruce Street, across Hollis Street, rapidly expanding in strength, the conflagration spread. Calls were sent to Lowell, Mass., and Manchester for help. Meanwhile, the entire Crown Hill section was jeopardized, including Allds Street, Bowers Street, Marshall, Burke and upper Hollis, spreading rapidly southward to the American Box & Lumber Company's plant.

"By 3:30 o'clock the fire, which had menaced the J. F. McElwaine Company plant, had gone south and reached the plant of the White Mountain Freezer Company and Proctor Bros.' lumber yard, spreading along to the Nashua Country Club. The flames burned briskly on the easterly side of the pond and just missed the caddy house.

"At 4:30 o'clock the fire area was bounded on the north by Temple Street, easterly by Arlington Street, southerly by Salmon Brook and westerly by Harbor Avenue. All the homes, factories, lumber yards and box factories in the following streets were either on fire or in immediate danger: Worcester, White's Court, Spruce, East Hollis, Harbor, Marshall, Allds, King, Haines, Crown, Thomas, Cherry, Harvard, part of Bowers, Arlington, Gillis and Williams Streets southerly, to the American Box & Lumber Company plant, sweeping along the westerly bank of the Merrimac. It spread as far as Tyngsboro before it was finally checked."

The Nashua firemen were aided by men and apparatus from many nearby municipalities including Lowell, Lawrence, Manchester, Hudson, Milford, Merrimac, Westford, Hollis, Woburn, Winchester, Pelham, Pepperell, Raymond, Tyngsboro, Dracut, Belmont, Lynn, Salem, Revere and Arlington.

Three units of the National Guard were called out. The Salvation Army furnished coffee, doughnuts, and sandwiches. Two firemen suffered injuries and many were affected by the smoke. A relief fund is being raised for the benefit of the homeless families. Army cots were pressed into use and emergency quarters provided. After a check of the residents of the burned district it was announced that two persons were missing.

Jacksonville Has Two Four-Alarm Fires

Within two days, Jacksonville, Fla., suffered from two four-alarm fires. The first occurred on Sunday morning at 3:35 a.m. in a jewelry establishment. Chief H. R. MacMillan, Assistant Chief E. A. Perry and Engines 1, 2 and 3, Trucks 1 and 2 and High Pressure Co. 1 and 2 responded. A third alarm was sent at once bringing four more engine companies, a ladder company and Chief G. E. Hare. After a more thorough inspection of the fire a fourth alarm was sounded. Two additional engine companies responded.

Twenty hydrants, about half high pressure hydrants, were available. Six high pressure streams were used and eight engines supplied other lines at 150 pounds average pressure. The fire was confined to the floor of origin. Salvage covers prevented a large property damage. The "all out" signal was given at 6:15 a.m.

The following morning fire was discovered on the top floor of a three-story building occupied by a furniture company. The alarm was sounded at 6:26 a.m., and brought Engines 4 and 7, and Truck 2 with Assistant Chief G. E. Hare in charge. When the companies arrived flames were spurting from every window on the top floor and the roof. Chief Hare immediately turned in a third alarm. To this alarm came Chief H. R. MacMillan, Assistant Chief E. A. Perry, Engines 1, 3, 5 and 8 and Truck 1. When Chief MacMillan arrived he ordered the transmission of a fourth alarm. This brought two additional engine companies.

Sixteen streams with an average pressure of 150 pounds pressure as well as high pressure lines siamesed into turret pipes were used. The 80-foot aerial was run up with a deluge line placed on the top of the ladder.

Owing to the delay in reporting these fires, it was necessary to use powerful streams. This caused excessive water

Another Fire Breaks Out in Oil Fields

Fire that started in Bandini Well No. 14 of the Wilshire Oil Company, Santa Fe Springs, Cal., for a time threatened a large oil area with destruction. After two hours work, firemen succeeding in isolating the blaze.

damage but the fires were confined to the points of origin. All out for the second fire was sounded at 8:30 a.m.

In both instances the signal was sounded calling the "off-shift" to duty, and Assistant Chief W. Q. Dowling organized men and apparatus for any other emergency that might have developed during that time.

D. G. AID.

Ten Killed by Fireworks Explosion

A series of severe explosions in the buildings of the Pennsylvania Fireworks Display Company in Devon, sixteen miles from Philadelphia, completely demolished the buildings and killed ten persons. Others were injured.

In all, there were three explosions, the first one not very serious. The second detonation occurred in the center of the plant and one minute after these two blasts a third shed was blown up. The cause could not be discovered.

All of the dead were employees of the plant. Some people passing by at the time were hurled to the ground and buried by the debris.

Householders for miles around rushed from their homes to be greeted by a dense cloud of black smoke. Automobiles on nearby highways were overturned. The main factory building was constructed of concrete blocks. Many of these blocks were hurled hundreds of yards away.

A general fire alarm was sounded and apparatus responded from adjoining communities—Bryn Mawr, Ardmore, Wayne, Radnor, Berwyn and Paoli. Members of the Bryn Mawr company were unaware that some explosives still remained and they rushed in to attack a brush fire. The men were

The Result of the Fireworks Explosions in Devon

warned and removed the apparatus a short while before the third blast came.

The shock was felt in the city hall at Philadelphia. Residents of West Philadelphia rushed from their homes as they felt the floors shake.

Soulé Elected Fire Marshal for Eighth Time

Ex-Chief F. E. Soulé, of Coatesville, Pa., has been elected Fire Marshall of Chester County, Pa., for the eighth consecutive year, or ever since the Chester County Firemen's Association was formed. Chief Soulé is Secretary of the Eastern Association of Fire Chiefs which meets at the Lord Baltimore Hotel in Baltimore, Md., for its third annual convention on June 10 and 11.

Slamin Named Chief of Wellesley, Mass.—Capt. Thomas Slamin has been named Chief of the Wellesley, Mass., fire department succeeding Chief T. J. McNamara.

Northboro, Mass., Firemen Resign—Firemen in Northboro, Mass., resigned in a body as a protest because Chief Herbert P. Ford was not reappointed as head of the department.

Springvale, Me., Observes Fire Anniversary—On April 14 the village of Springvale, Me., observed the twenty-fifth anniversary of the great fire which destroyed two shoe factories, twenty business blocks and fifteen residences.

Chief Grant Reaches 85th Birthday—Chief Robert H. Grant of Beverly, Mass., celebrated his eighty-fifth birthday. He is one of the oldest active fire chiefs in America, and entered the fire department sixty-five years ago as a member of a hand tub company. He has been Chief since 1914.

WHAT'S BURNING

THE following list includes fires of $25,000 loss and over in the United States and Canada, for the periods designated in the headings. These figures, compiled from telegraphic reports, are based on estimates made at the time, and are subject to later investigation and consequent revision. Taken as a whole, however, they give an approximately correct view of the losses incurred. The figures represent loss in thousand.

Week Ending May 9

CHICAGO, ILL.—Tanks of Interocean Sales Corp.	200
SMITHFIELD, W. VA.—Brown Hotel and adj. property	150
SUMTER, S. C.—Plant of Avery Lumber Co.	40
MANCHESTER, MD.—Factory of Lewis Levy destroyed	40
HARVARD STATION, WASH.—Plant of Specialty Lumber & Mfg. Co.	80
ELIZABETH, N. J.—Plant of Allied Tar & Distillates Co.	65
DANVILLE, ILL.—Cornstalk Product Co. pulp plant	50
LOS ANGELES, CAL.—Property of Plomb Tool & Mfg. Co.	40
SASKATOON, SASK.—Storage sheds of Canadian Oil Co.	30
ST. JOHNSVILLE, N. Y.—Plant of Clark Machinery Co.	80
PRINCETON, B. C.—Princeton Hotel damaged	80
FALL RIVER, MASS.—Coal sheds of Salvatore Petrillo	25
POST, TEX.—Chevrolet bldg. destroyed	40
TORONTO, ONT.—Bldg. of Powell Chemical Co.	25
CHICOPEE, MASS.—Bldg. of A. G. Spalding & Bros.	150
VANCOUVER, B. C.—Heavy goods warehouse destroyed	200
McALESTER, OKLA.—Krone Dept. store damaged	40
HAGERSTOWN, MD.—Ice plant of Central Atlantic Service Corp.	40
SHERMAN, TEX.—Grayson County Court House destroyed	45
WHIPPANY, N. J.—Whse. of Frank Desiderio & Sons	45
TACOMA, WASH.—Mill of Puget Sound Lumber Co.	400
OWENSBORO, KY.—Plant of Owensboro Milling Co.	50
SAVANNAH, GA.—Main bldg. Lindsay-McMillan Co.	25
SYRACUSE, N. Y.—Pierce, Butler & Pierce Mfg. Co.	800
CHICAGO, ILL.—Elevator of Rosenbaum Corp.	250
YOUNGSTOWN, PA.—Engstrom store, adj. property	150
MURPHYSBORO, ILL.—Vallo Wholesale Grocery Co. bldg.	25
JAMESTOWN, TENN.—Downtown business property	125
NEW YORK, N. Y.—Mosback Hdw. Co., 78 Warren St.	150
HUDSON FALLS, N. Y.—Garage of Herman Duers destroyed	65
DECATUR, ALA.—Annex of First M. E. Church	30

Week Ending May 16

GALT, ONT., CAN.—Plant of Galt Malleable Iron Co.	25
RUSHVILLE, IND.—Mulline-Gilson Mfg. Co. property	30
SCRANTON, PA.—Two dwellings in Little England Section	25
WILLARD, OHIO—Business district damaged	45
YOUNGSTOWN, PA.—Business district damaged	150
HUNTINGTON PARK, CAL.—Bldgs. of National Mills & Grain Co.	125
OMAHA, NEB.—Store of Omaha Paper & Nation Co.	25
N. STRATFORD, N. H.—Brunswick Spring Hotel	65
PINEHURST, N. C.—Pinehurst Steam Laundry	35
IRONA, N. J.—Farm property of D. B. Swazey	25
MARLBORO, VA.—Mill property of L. L. Link	25
GRANVILLE, N. Y.—Brodie block damaged	25
WINNIPEG, MAN.—Old Trinity bldg. destroyed	50
BINGHAM, ME.—Several business etsablishments	50
LEWISTON, IDAHO.—Bldg. of East End Trading Co.	30
ATHERTON, CAL.—Home of Clarence Walter damaged	35
EDISON, WASH.—Edison Hotel, adj. property	40
HOMEWOOD, PA.—Garage of Red Line Transit Co.	45
FORDWICH, ONT.—Main business block destroyed	35
ST. LOUIS, MO.—Vacant bldg. at 3950 Forest Park Blvd.	25
TOLEDO, OHIO.—Garage of Railway Express Agency, Inc.	70
ALTUS, OKLA.—C. L. Johnson store, adj. property	45
COTTONWOOD, IDAHO—Milling Div. Farmers Union Whse.	125
STAMFORD, CONN.—Factory of J. P. Curry Mfg. Co.	40
MILWAUKEE, WIS.—St. Aemillian's Orphanage destroyed	300
CHICAGO, ILL.—Armour Company elevator destroyed	500
LATONIA, (Sta. Covington) KY.—Plant of Beets Lumber Co.	45

Fire Routs State Hospital Patients

For the third time in a year, fire believed to be of incendiary origin routed ninety-two women patients at the Central Islip State Hospital, Central Islip, N. Y., shortly after midnight. The women were described as being chronic patients, and among the more serious of the 7,000 mentally unbalanced inmates.

The fire itself was slight. As soon as it was discovered, a call was sent to the hospital fire department and to the towns of Bay Shore, Islip, East Islip, Central Islip, Brentwood, Smithtown and St. James.

The women enjoyed being moved from one ward to another, and shouted and laughed as they were led out into the night.

The blaze was confined to the basement, and at first it was believed that the flames were due to an electrical short circuit. Later investigation disproved the theory. The physician in charge recalled two other fires, both of suspicious origin, and somewhat similar to the last one.

Delaware County Firemen to Meet—Plans have been made for the convention of the Delaware County Firemen's Association to be held in Linwood, Del., June 13 and 14.

Second Pumper Delivered to Syracuse, N. Y.—The second of two 1,000-gallon Seagrave pumpers has been delivered to Syracuse, N. Y.

BOARD OF MERIT ANNOUNCES NEW YORK MEDAL WINNERS

Battalion Chief John Spencer Awarded Administration Medal—Hook and Ladder No. 16 Wins Fire College Efficiency Prize

By WILLIAM JEROME DALY

FIRE COMMISSIONER JOHN J. DORMAN has approved the findings and recommendations of the Board of Merit of the New York Fire Department for the year 1929. Out of the numerous acts of heroism performed by members of the department last year, fifteen fire fighters were selected for signal honors. For the first time in the history of the department, two brothers, Lieut. Richard J. Egan of H. & L. Co. 20 and fireman Edward L. Egan of H. & L. Co. 30 have been cited simultaneously for valor in the line of duty.

Medals will be pinned on the heroes by Mayor James J. Walker at the City Hall in June on a day to be selected at the convenience of the Mayor.

In addition to the medals awarded for meritorious performance in saving human life in peril, the Board of Merit also selected for award Capt. William P. Murphy of Engine Co. 56. He will receive the Stephenson Medal in recognition of having maintained the best disciplined fire company last year. The citation states that Capt. Murphy's record as a company commander has been exemplary, that he has never been disciplined himself, and that he is the holder of the Fire College Medal in 1913. Capt. Murphy's fire house is on West 83rd Street, near Columbus Avenue, where the Fire Department ambulance is located. He has been a fire fighter for twenty years and has always been stationed in the mid-town Manhattan tenement house districts.

Fireman Edward V. Conroy, of H. & L. Co. 1, is awarded the Bennett Medal and Department Medal for his unusual courage in attempting to save the life of his comrade, Fireman William Vogel, at a fire in 18 Hamilton Street, Manhattan, at midnight, November 25th. Both firemen were terribly burned on the third floor of the tenement by a flash fire which enveloped them. Conroy, although painfully hurt, disregarded his own safety and picked up the unconscious Vogel. In going so he scraped the burned flesh from his own hands and arms, but managed to carry Vogel to the stairway, where other firemen assisted both of them to the street. Vogel died in Gouverneur Hospital and Conroy was a patient there for weeks. He will bear scars of his burns for the rest of his life. He is now assigned to H. & L. Co. 37 in the Bedford Park section of the Bronx, but is on sick-leave, not having fully recovered from the effects of his injuries.

Fireman Ambrose W. P. Moran, of H. & L. Co. 121, is awarded the Bonner Medal and Department Medal. On the night of April 16, 1929, fire wrecked the Colonial Hotel at Arverne. Moran was severely burned about the legs and hips and was in an ambulance undergoing treatment by a hospital interne when a sidewall of the hotel collapsed, burying several firemen. Moran leaped out of the ambulance, disregarding his own condition and hastened to the assistance of his imprisoned comrades. He climbed over, under and through debris, where he made an improvised pry-bar and lifted the weight of part of the fallen wall off the other fire fighters until they had been released and assisted to safety. Moran was then removed to a hospital for further treatment.

Workmen using acetylene torches to dismantle the steel in a building being demolished to make way for the city's new subway system at Lafayette and Houston Streets last October 8, accidentally set fire to the building and Joseph Sweeny, a laborer, was trapped in the building. Sweeny took refuge on the roof where he was observed by Lieut. Richard J. Egan, and by fireman John F. Grimes, both of H. & L. Co. No. 20. The aerial ladder of the company was swung into position against the wall. Egan and Grimes ascended to the fifth floor where they found the window locked. Fire and smoke had complete possession of all floors. The firemen crawled along a ledge of the fifth floor to an open window, but finding the stairway aflame, they wended their way to the fire escape on the Crosby Street side and climbed to the seventh floor, but the roof parapet was beyond reach. Grimes braced himself and on his clasped hands and shoulders, Lieut. Egan scaled his way to within reach of the cornice. He counselled Sweeny to let himself over the edge of the roof, while he guided the man against the wall to the fire escape landing. When the belching flames from lower windows had been extinguished, the firemen aided the rescued man to safety below. Lieut. Egan will receive the Trevor-Warren Medal and Department Medal. Grimes will receive a Department Medal.

The Kenny Memorial Medal and Department Medal go to fireman Thomas P. Mulvaney of H. & L. Co. 109, for his rescue of a 82-year-old woman from a fire at 226 Fifteenth Street, Brooklyn, in the afternoon of November 17.

Although she died from burns, Fireman Mulvaney's unusual heroism is nevertheless recognized. The fireman entered the third floor from a ladder. He found her unconscious in her home which was heavily charged with smoke, heat and flames. Mulvaney carried her to the window where firemen John J. O'Connor and Thomas J. O'Hara carried her down the ladder to the street where she died. Firemen O'Connor and O'Hara have been recommended for recognition in a lesser degree.

The fatal fire in the Pathe Studio in Harlem December 10 furnished the occasion for recognition of the heroism of fireman Edward L. Egan of H. & L. Co. 30. Egan's hook and ladder truck was the first to reach the 134th Street side of the studio. As the big apparatus rolled in front of the building, frenzied men and women of the cast who had escaped the flames, began to seize ladders and maul the firemen while shouting a chorus of commands and directions. Lieut. Thomas McCoy of the truck company observed a woman imprisoned behind a heavy mesh window screen on the second floor. He ordered fireman Egan to get her. Egan, with a heavy axe, ascended a ladder and hacked the screen off the window frame. In the interim, the woman, a film cutter, residing in Mt. Vernon, had disappeared. A wooden partition divided the window in two. In the blinding smoke, Egan entered on what proved to be the wrong side of the partition. Groping his way about in the dressing room of which the partition was a part, Egan endured the heat and smoke as long as he could. He returned to the window for a breath of air, crossed over to the other side of the partition and re-entered the heavily charged atmosphere. Again he groped about in the haze and heat until he felt himself yielding.

Suddenly Egan came upon the unconscious woman, and although nearly exhausted, he managed to lift her to the window sill. Fireman Daniel J. Goff and Lieut. McCoy, apprehensive lest Egan had been lost in the burning building were atop the ladder and about to enter the window themselves. They reached in and relieved Egan of his burden. Goff carried the woman to the street, while Lieut. McCoy remained with Egan and assisted him in his weakened condition to safety. Fireman Egan will receive the Van Heukelom Medal and Department Medal. Lieut. McCoy and fireman Goff will be cited for lesser recognition.

Nozzle Used to Spread Foam in Germany

A demonstration was staged in Berlin, Germany, to show the use of foam in extinguishing oil fires. The odd-shaped nozzle is designed to decrease the stream velocity so that the foam will not be driven beneath the surface of oil in tanks.

Fire of evidently incendiary origin just before dawn on August 7 endangered the tenants of 136 Thatford Avenue, Brooklyn. It had possession of the entire stairway and hallways and had gained the third floor apartment in the rear. Members of H. & L. Co. 120 raised ladders against the front wall. Lieut. Henry Rohrbach and fireman Augustus Kettler ascended to the third floor. Kettler entered and found Mr. and Mrs. William Ives. Lifting the woman first, he carried her to the window where Lieut. Rohrbach passed her on to firemen Edmond Quinlan and Arthur I. Williams on the ladder. The performance was repeated with the husband. Fireman Kettler will receive the Brooklyn Citizens' Medal and Department Medal and Lieut. Rohrbach will get a Department Medal. The other firemen will receive second class awards.

The Crimmins Memorial Medal and Department Medal go to fireman Walter T. Hazrick, who is chauffeur to Deputy Chief James W. Heffernan, a member of the Board of Merit. On the afternoon of January 6, 1929, a crippled deaf mute was trapped on the fifth floor in a building afire at 368 Broadway. An aerial ladder was raised and fireman Hazrick with fireman William A. Dorritie, of Rescue Co. No. 1, and fireman Harry Schmall of H. & L. Co. 8, ascended with a rope. They found the deaf mute partially unconscious. Between them they lowered the man down the ladder. Dorritie and Schmall are recommended for second class award.

Capt. Frederick J. G. Wedemeyer will receive the Brookman Medal and Department Medal and fireman Jerome Mayer will receive a Department Medal for their joint rescue of a woman from the fifth floor of 82 West 105th Street, on the night of December 31. Both fire fighters are attached to H. & L. Co. 22. Captain Wedemeyer ascended a ladder thirty-five feet high from which he used a scaling ladder and built his way up the window sills to the fifth floor. The woman was unconscious. Capt. Wedemeyer carried her to the window. With the assistance of fireman Mayer they brought her to safety amid volumes of smoke and flame.

For rescuing three persons from a building, fireman Daniel D. Mahoney of H. & L. Co. 122, will receive the Prentice Medal and Department Medal. On the morning of November 22, at 487 Twelfth Street, Brooklyn, Mahoney saved Mrs. Emma Oplenti and her five-year son Andrew. He passed them down a ladder to fireman Charles Wallace of H. & L. Co. No. 147.

When Mahoney was descending to escape further danger to himself he frustrated a woman from jumping from the second floor window by wreathing one of his legs between the rungs of the ladder and reaching toward the building. He lifted the woman from the window sill, taking her by ladder to the sidewalk.

Fireman William J. May of H. & L. Co. 6, will receive the Scott Medal and Department Medal for his rescue of an eighty-four-year old woman from the third floor of a tenement at 22 Allen Street, Manhattan, shortly after midnight July 18. Fireman May had participated in a previous rescue at the same fire in company with firemen Jean H. J. Rudolph and Thomas Coan. Fireman May found the unconscious woman badly burned and under the most severe ordeal he managed to carry her down a perpendicular hot iron ladder to the second floor fire escape, then by way of a wooden ladder to the sidewalk where he collapsed and had to be rushed to a hospital for treatment for smoke and contusions. The rescued woman died in the same hospital three days later.

Department Medals are awarded to fireman Charles T. Leary, Jr., and to fireman Francis P. J. Donlon, Union Course, Queens, for their rescue of two children at a fire early in the morning of December 21 last, at 445 Watkins Street, Brooklyn. Both are members of H. & L. Co. 120. Leary has since been promoted to the rank of Lieutenant.

The Dr. Harry M. Archer Medal, donated every three years by Dr. Herman L. Reis, Medical Officer of the Fire Department, for the best of the Bennett Medal winners during the preceding three years, was awarded to fireman Michael McInerney of H. &. L. Co. 12 for saving the life of a woman at 311 West 27th Street, on the night of April 12, 1926. She was about to jump from the fourth floor, when McInerney swung like a pendulum from an aerial ladder five feet distant from the facade of the building. Fire was raging behind the woman in her home. McInerney lifted her toward the ladder and with his legs he clamped her against the under-side of the ladder and held her in a vice-like grip until other firemen raised her over to the top-side of the ladder and carried her to the street.

To Battalion Chief John Spencer of Staten Island is awarded the Administration Medal for having invented and presented to the Fire Department a number of approved appliances and devices which are time and labor savers in fire fighting. Chief Spencer is one of the department's veteran officers.

Hook and Ladder Co. No. 16 in East 67th Street, Manhattan, wins the Fire College Efficiency Prize for the year 1929. The company is comprised of Capt. Louis S. J. Moran, Lieut. James Harnett, firemen James Conmy, Robert J. Davis, Harry W. Held, Colman Kerley, Patrick M. Larkin, Michael Mahon, Ernest Mattes, John J. McEnroy, Patrick J. Murphy, Jeremiah F. Murphy, William Nygryn, Timothy O'Callaghan, Edward J. Smith.

The Board of Merit consists of Deputy Commissioner Joseph M. Hannon, Chairman; Deputy Commissioner Charles W. Jannicky, Fire Chief John Kenlon, Assistant Chief Joseph B. Martin, Deputy Chiefs John Davin, Thomas R. Langford, John F. King, Patrick Maher and James W. Heffernan. James V. Collins is Secretary of the Board.

Florida Holds First Fire College

Approximately one hundred students representing thirty-nine cities in the state attended the first Florida Fire College held at Daytona Beach, May 7-9. The results exceeded the wildest expectations of the committee in charge. Next year the college will be held in Sebring.

Each student who registered received a booklet containing the program, blank sheets for notes and a sheet of coupons to assist in taking attendance at the various lectures. The students were given a grade at the conclusion of the course based on the following scale: Attendance 50%, punctuality 25%, notes 10% and interest 15%.

On the first day there were lectures on "Salvage," by Chief D. W. Brosnan, Albany, Ga.; "Chemistry of Fires,"

Instructors and Arrangement Committee of Florida Fire College

Standing, left to right, are the instructors: L. C. Sledge, Engineer, Southeastern Underwriters Association; J. H. Holmes, Manager, Florida Inspection and Rating Bureau; G. P. Allen, Chief of Signal Bureau, Jacksonville; J. S. McGehee, Engineer, The Gamewell Co.; H. D. Cutter, Engineer, S. E. U. A.; Sherwood Brockwell, Fire Marshal, North Carolina; D. W. Brosnan, Chief of Department, Albany, Ga.; J. O. Eaves, Master Mechanic, American-LaFrance & Foamite Industries; J. B. Chancey, Assistant Chief, Jacksonville; T. P. Branch, Engineer, S.E.U.A.; C. E. Saxon, Engineer, Bureau of Mines. Members of the Committee of Arrangements are in the front row: A. C. Altvater, Chief, Sebring, Fla.; F. C. Pfaender, Chief, Winter Haven; Wm. R. Anderson, Chief, Ft. Myers; J. F. MacMillan, Chief, Cocoa, Fla., and B. B. Hart, Chief, Daytona Beach.

by H. K. Brown, Professor of Chemistry, University of Florida, and a round table discussion. For the second day there were talks on "Fire Alarm Systems," by George P. Allen and Hal Cummings; "Building Inspections," by H. D. Cutter of the Southeastern Underwriters Association, "Artificial Respiration and Resuscitation," by C. E. Saxon, Engineer, Bureau of Mines, and a round table discussion in the evening.

On the concluding day there were lectures on "Arson Control," by Edward S. Davies, Special Agent, National Board of Fire Underwriters; "Ventilation," by Assistant Chief J. B. Chancey, Jacksonville; "Electrical Hazards," by T. P. Branch, Southeastern Underwriters Association, and "Fire Truck Construction and Maintenance," by J. O. Eaves, Master Mechanic, American-LaFrance & Foamite Industries.

Valley City, N. D., Has Foam Equipment—Foam generating equipment has been added to Valley City, N. D.

Fire Prevention Bureau for Joliet—A move has been started by Assistant Chief Thomas Ruddy and the president of the Chamber of Commerce to establish a fire prevention bureau in Joliet, Ill.

CORRESPONDENCE

Explanation of Penitentiary Fire

To the Editor:

I have read the article in the last issue of FIRE ENGINEERING on the subject of the fire at the Ohio State Penitentiary, and while I have no criticism to offer of the article as a whole, I believe that you have overlooked the principal element regarding this fire. As to whether it started from incendiary causes or not I do not know, but whether it did or not, has no bearing on the point which I want to make. Neither does the fact that the building was an old building have any bearing.

Two new cell blocks had been authorized inside the old building. The old ones had been removed and one of the cell blocks was completed and occupied, the other was in process of construction. The new cell blocks are built with concrete walls and floors. They were being built with prison labor. Necessarily, the concrete walls were not very thick. There was a longitudinal wall running the full length of the bock separating two rows of cells. There were lateral walls at right angles to this longitudinal wall making cells about 8' x 8'.

The forms used for this concrete were of wood and were being used over and over again. In order to make a smooth job of concrete, the face of the forms was covered with paraffin. You can readily see that if a fire would get started in this form work, coated with paraffin, what a terrible condition would exist. There was no separation between this cell block which was under construction and the cell block which had been completed and was occupied. Notwithstanding the terrible hazard which was present because of these paraffin coated forms there was no extra provision made for fire protection. The fire started in these forms.

The point I want to make is, that these people at Columbus were guilty of the same thing which the majority of people all over the country are guilty of, and that is that they assumed that nothing is going to happen, and then if it does happen, then some such a disaster as this occurs. It is a common failing, and one which can not be emphasized too strongly. I do not see why we should criticise the authorities at Columbus when in every city and town and village all over the country, the same thought, or lack of thought, prevails. Institutions of all kinds, stores, theatres, churches, hospitals, schools are subject to the same kind of a disaster because the necessity for making provision beforehand to prevent such disasters is not recognized.

I presume it is safe to say that if a commission was appointed to investigate and report on the Columbus disaster, that there would be on that commission several men who were connected with some business or institution in which the same lack of forethought could be shown.

Such disasters as these are of no value unless a very wide spread publication of this universal weakness is made. Our Chamber of Commerce Fire Prevention Committee has undertaken a local campaign to call the attention of those at the head of such places to this condition of affairs and to try to impress upon them that before they enter into any hysterical condemnation of the people at Columbus, that they had better look over their own state of affairs first, and I believe it would be just as well if this disaster could be made the basis of a similar movement all over the country.

Yours very truly,
W. T. FILMER,
Fire Prevention Director,
Youngstown Sheet and Tube Co.,
Youngstown, Ohio.

Purchase of Apparatus Deferred in Madison, N. J.—Action on the purchase of fire apparatus for Madison, N. J., has been postponed to a later date.

Lakefield, Ont., Buys Pumper—The village council of Lakefield, Ont., Canada, has purchased a 600 Imperial gallon triple combination pumper from the Bickle Fire Engine Company. It will be delivered some time in June.

Three Stores in Augusta, Ga., Gutted—Firemen of Augusta, Ga., succeeded in getting control of a blaze that gutted three stores and for a time threatened a block of buildings in the heart of the business district. Damage was estimated at $400,000.

Plans Approved for Staten Island Houses—Plans have been approved for fire stations to be erected in Mariners Harbor, South Beach, and New Brighton by the Board of Estimate of New York City. Each of the Staten Island stations is to cost $70,000.

Firemen Use Crane to Lift Hose

Fire caused by a hot rivet dropped by a steelworker from the twenty-sixth floor caused a spectacular blaze on the foureenth floor of the new thirty-two story Bank of Commerce building in Toronto, Canada. High-Pressure Box 12 King and Bay Sts. was pulled by a policeman and received at the Fire Department switchboard at 5.02 p.m. bringing Chief William Russell, Deputy Chief Duncan McLean, Dist. Chief Corbett along with 3 American-LaFrance Hose Trucks, 1 Seagreave High Pressure truck, 1 American-LaFrance 1000-gallon triple combination pumper, 1 LaFrance rescue car; and 285-foot American-LaFrance Aerial trucks.

One line of 2½-inch hose was coupled to the pumper and a crane on the seventh floor was used to hoist the hose to that point. From there it was dragged up a temporary stairway to the fire on the fourteenth floor where wooden scaffolding and tarpaulins were burning. The pump pressure was raised to 160 pounds and a good stream was obtained. The fire was confined to tarpaulins and scaffolding on the fourteenth and fifteenth floors and the damage was slight.

JOHN KARL LEE.

W. R. Phillips with Gamewell Co.

Announcement has been made of the appointment of W. R. Phillips as Assistant to the President of the Gamewell Company.

Just before coming with the fire alarm company, Mr. Phillips was Vice-Present and General Manager of the New England Portland Cement Company. Prior to that time he was Vice-President and General Manager of the American Lime and Stone Company.

W. R. Phillips

Previous to that he was Secretary and General Manager of the National Lime Association, in Washington, D. C. In that position his duties were to look after the interests of the Association for the entire country and to keep fully informed regarding any political movements which might have any effect on the lime business.

For a considerable period before the lime association work he was engaged in the engineering and contracting field in various sections of the country and he has managed his own company.

Saulte Ste. Marie Against Outside Calls—The commission of Sault Ste., Marie, Mich., ruled that the fire apparatus should not be allowed to go beyond the city limits.

Nashua Relief Association Aids Homeless—The Firemen's Relief Association of Nashua, N. H., has donated $5,000 to the general relief fund for the homeless families who lost everything in the recent conflagration.

Spokane May Merge Fire Stations—A survey has been made of the fire stations in Spokane, Wash., by Safety Commissioner Lambert with a view to consolidating some of the stations. Plans for a new $13,000 fire house are pending.

Merion Township to Use Telephone Alarms—Merion Township, Pa., will use the telephone for reporting fires. A forty-line switchboard is to be placed in the township building.

Recreation Center Destroyed by Flames

The main building of a $1,200,000 recreation center in Norwood, Mass., was razed by fire. The frame building offered little resistance.

N. F. P. A. PRESIDENT ADVOCATES MODERNIZING OF OLD BUILDINGS

Association Holds Its Thirty-fourth Annual Meeting at Atlantic City — Over Fifty Committee Reports Presented

PRESIDENT FRANK C. JORDAN, of the National Fire Protection Association, at its thirty-fourth annual meeting in his presidential address opening the convention advocated a nation-wide campaign for modernizing old buildings to reduce the menace of firetraps which, he said, take about 10,000 lives each year. Mr. Jordan is Secretary of the Indianapolis, Ind., Water Company. The meeting of the association was held at Hotel Haddon Hall, Atlantic City, N. J., on May 12 to 14, with a large attendance of delegates. Reports were received from over fifty committees, representing every phase of fire protection and prevention.

William F. Steffens, chief fire prevention engineer of the New York Central Lines, said that cigarettes thrown out of automobiles were the cause of the recent forest fires. Albert W. Pell, chairman of the New York City committee, in a report to the convention, said that fire hazards of New York's subway systems were now matters of record, following the intervention of the Transit Commission, after the Interborough subway officials had refused permission for the inspection of the safety measures in the Times Square station.

The fire marshals' section of the association decided to establish a rogue's gallery of firebugs similar to that maintained by the police for criminals. The decision was regarded as an important step forward in the efforts to suppress incendiarism.

Percy Bugbee of Boston, formerly secretary of the fire marshals' section, was appointed to take charge of receiving and tabulating the photographs and to distribute them to the members in their respective cities.

It was declared that the superior methods of supervision employed in Canada had resulted in a material reduction of fires due to the activities of incendiaries. This was pronounced to be in sharp contrast with the United States, where the estimated losses from arson remain high.

Franklin H. Wentworth pointed out that twenty-seven States have enacted a model arson law recommended by the association. In the other States, he said, it is not arson to burn one's own property and a person convicted for doing so cannot be punished under an arson charge but only under a charge defrauding an insurance company. He remarked that "we Americans do not abolish an abuse by passing laws against it," adding that some other remedy must be employed to check the burning of property as a result of business depressions.

Mr. Wentworth said that "the piling up of our fire losses following a decline in business activity is a fairly well recognized American institution." He said that the recent stock market crash temporarily suspended the gambling operations of 15,000,000 persons.

"While it may be assumed," he continued, "that only a small percentage of these might be tempted to liquidate their assets with a torch, the rapid rise in the fire loss curve last Fall suggested that there were enough of them to jeopardize the steadily improving fire record of the nation during the past few years. If any comfort might be derived from the situation it is that it was not as bad as it might have been."

Bureau of Standards Tests Airport Sprinkler System

Condemned planes were set on fire at Washington, D. C., by the United States Bureau of Standards in order to test the sprinkler system method of fire protection for airports. The photograph shows one of the planes set on fire for the test.

PLAN OF INSPECTION WORK FOLLOWED BY ASHEVILLE, N. C.

Building Inspector Required to Make Annual Inspection of Entire City — Possible to Keep Check of Bad Hazards

By A. L. DUCKETT
Chief of Fire Department, Asheville, N. C.

EACH member of the department is required to spend one day of the week in which he is off duty during the day, in making inspections. The men work in pairs—partners are changed each inspection day, and a diffeernt section of the business area is covered until the entire circuit is completed.

A card is filed for each business house in the business district. On this card is shown the owner of the building, owner of the business occupying the building, agent in charge of the building, street location, for what the structure is used and designed, and conditions of each floor and basement. The following facts are noted: Condition of fire escapes, chimneys, flues, stoves, stovepipes, electric wiring, closets, yards, location of exits, location of any trash or fire hazard, if gasoline is kept in container, and the general condition of the building. This card shows the date and by whom the inspection was made.

Each pair of inspectors carries a pad of blanks which is made to correspond with a single inspection for the permanent record. This blank is filled in by the inspectors, dated, signed and returned to the office. The record is transferred to the corresponding card for filing, and the inspector's blank is destroyed if the building is found in good condition.

If conditions are found that should be corrected, the blank is given to an officer, who visits the buildings and informs the owner as to what the inspectors have reported and requests that conditions be corrected. If the violation was corrected, a record is made on the permanent card, showing date of correction and name of officer reporting. If nothing has been done, the blank is filed with violations and the above procedure is followed weekly until the building is apt to be put in a safe condition.

Where serious hazards are found or when the officers fail to get the desired results, the blank is given to the Chief or Assistant Chief of the department for them to take such action as might be necessary. This last step is seldom necessary, for the public has been cooperating in an excellent manner.

In the office there is a large map of the business district on the wall, on which the buildings which are in an unsatisfactory condition are shown by means of a red pin. When conditions have been corrected, the pin is removed. Inspections in the busines district are made by members from headquarters. Each sub-station does the same work in its respective district.

The building inspector is required to make an annual inspection of the entire city. The business districts are handled by the Fire Department. It requires in the neighborhood of five weeks to make a complete circuit of these districts, which causes each building to be inspected every four or five weeks. Factories are inspected along with business districts.

Officers are required to spend one day each week during their week of night duty in inspecting. These officers handle all the violations which have been reported by the inspectors. In case there are not enough violations to require the officers' full time, they do regular inspection work.

The plan followed has given complete satisfaction. Since the scheme was adopted, fires in the business district have been decreased. Since each establishment has a separate file card, it is possible to get a complete history of the place in question. This makes it possible for us to keep tabs on places that are habitually bad, and it enables members of the department to get a knowledge of every building in the city.

The inspectors coperate with other departments. Should they find any unsanitary conditions, the matter is passed on to the Health Department for action.

William J. Brennan, of Newark, Dead

William J. Brennan, Director of Public Safety in Newark, N. J., for twelve years, died at the age of fifty-seven as the result of pneumonia. His illness was complicated by kidney disease.

He was serving his fourth term as City Commissioner under the new form of government by commission.

Born in French Park, County Roscommon, Ireland, on Dec. 26, 1872, Mr. Brennan came to this country in 1892 and became a stationary fireman at Trenton. Within two years he moved to Newark, and ten years later was business agent of Local 55, International Brotherhood of Stationary Firemen, serving until 1917, with the exception of two years. He was vice president of the brotherhood from 1908 to 1911, and for five terms was president of the Essex Trades Council. From 1908 to 1912 he was on the executive board of the New Jersey Federation of Labor.

As head of the Police and Fire Departments, Commissioner Brennan was known as a strict disciplinarian but was quick to recognize meritorious work. The Family Court was created by him for the protection of female first offenders, the public being excluded from its sessions. He also created the Traffic Court, and later instituted the system of towing to garages cars parked on certain downtown streets during afternoon rush hours. The practice was subsequently discontinued. He was the author of a censorship ordinance, passed a few weeks ago, which gave his office the power to revoke the licenses of shows considered objectionable.

Mr. Brennan is survived by his widow, and eight children, and by his mother.

Ladder Truck to be Delivered to Bloomington—A ladder truck is to be delivered to Bloomington, Ind., about June 1.

Lincoln Firemen to Join Union—Members of the Lincoln, Ill., Fire Department voted to join the International Fire Fighters Association.

Station Planned for South Salem, Ore.—Bids have been opened for the construction of a fire station in South Salem, Ore.

Eugene C. Hultman Named Police Commissioner—Eugene C. Hultman, formerly Fire Commissioner of Boston, Mass., has been appointed Police Commissioner to succeed Commissioner Wilson who was removed by Goverior Allen.

Bids Received on El Paso, Tex., Houses—Bids have been received on new fire stations in El Paso, Tex., to cost about $33,000, and the purchase of fire apparatus estimated to cost $63,000.

Boston May Organize Department Band—Fire Commissioner Edward F. McLaughlin and Executive Secretary Herbert J. Hickey of Boston, Mass., are planning to organize a fire department band.

Owensmouth, Cal., May Have Fire House—The Chamber of Commerce of Owensmouth, Cal., has donated a site on which to erect a fire station, with the provision that the council appropriate $39,000 for the erection of the building and purchase of equipment.

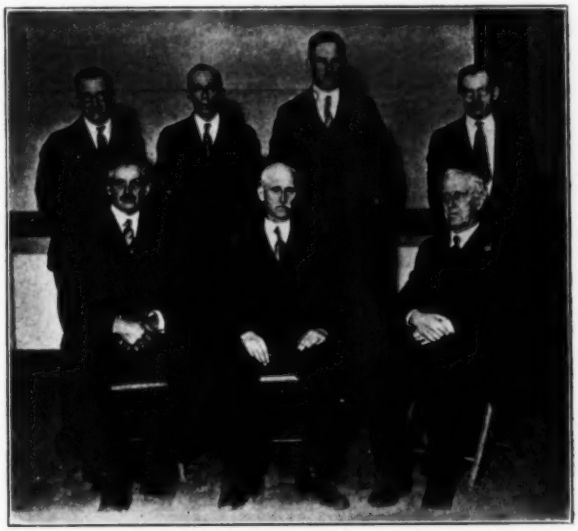
Berlin Firemen Try Out Their New Gas Masks

Firemen of Berlin, Germany, demonstrated their new gas masks. The photograph shows front and back views of this type of gas mask. All kinds of tests were arranged to show the value of this equipment.

Long Hill Company Has Steady Growth

The Long Hill Fire Company No. 1 of Long Hill, Conn., recently celebrated its eleventh year of existence as an organized and chartered body. The story of the Long Hill department's activities is one of determination, perseverance and public spiritedness.

Back in 1919 Long Hill the town began to grow and as it became more and more settled, so did the need of adequate fire protection make itself more keenly felt. After it was found that a few hand extinguishers and buckets distributed round from house to house was not the sort of fire fighting equipment that a growing community like Long Hill deserved, steps were taken among a few public spirited citizens and the nucleus of the present Long Hill Fire Department was formed.



Officers of the Long Hill, Conn., Department

Seated, left to right, Chief Charles Kellogg; A. J. Hull, first president of the company; Vice-President, W. S. Hawley. Standing, left to right, Secretary, David S. Leavitt; George A. Clark; President, Lawrence Sherman, and Captain, Armand Doyen.

Charles Kellogg, one of the town's leading citizens, was named fire chief and the company was organized with seventy-five members. As the company grew in numbers plans were laid for the erection of a new fire station. By this time eighteen more hand chemicals had been added to the town's equipment.

Today the Long Hill company is located in its new modern fire station which is just off the state highway leading from Bridgeport to Stepney. In it is located a new chemical truck and other equipment to handle fire fighting in the town. The new fire house is comfortable fitted up as a club room where dancing, athletics, games and other social activities find ample space.

Much of the social life of Long Hill centers round the fire company's quarters which offers every facility for community organization. Under the spacious portico, which supports an attractive solarium, a light is kept burning day and night as a signal that the fire station is always open, and an alarm being turned in a siren is sounded which invariably brings a hearty and wholesome response from the active members.

The officers of the Long Hill Fire Company No. 1 are: President, Lawrence Sherman; Chief, Charles Kellogg; Secretary, David Leavitt; Treasurer, George Clark; Captain, Armand Doyen.

THOMAS F. MAGNER.

Fire Alarm Boxes Added in St. Louis—According to the annual report, thirty-one new fire alarm boxes were installed in St. Louis, Mo., during the past year. The city now has a total of 1,878 boxes in service throughout the city.

Iowa City Raises Pay Scale—All members of the Iowa City, Ia., fire department with the exception of the chief and his two assistants had their pay increased ten dollars a month. The state law does not permit a salary increase in appointed offices during the tenure of office.

CONVENTION DATES

May 28—WESTCHESTER COUNTY FIRE CHIEFS' EMERGENCY PLAN. Dinner Meeting. "Westchester Manor," Westchester Ave. and Hutchinson River Parkway Extension, White Plains, N. Y., 7:30 p.m. Secretary-Treasurer, Lieut. E. Riviere, 42 Woodbine Ave., Larchmont, N. Y. Also address Chief Arthur Steuhl, Bronxville, N. Y.

June—HUDSON VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 41st Annual Convention, Rensselaer, N. Y. (Date to be set later.) Secretary, Pierce D. Kane, Averill Park, N. Y.

June 2-4—OKLAHOMA STATE FIREMEN'S ASSOCIATION. 36th Annual Convention, Tulsa, Okla. Secretary-Treasurer, Charles Slemp, 820 East 19th St., Oklahoma City, Okla.

June 2-6—AMERICAN WATER WORKS ASSOCIATION. 50th Annual Convention, Hotel Jefferson, St. Louis, Mo. Secretary, Beekman C. Little, Rochester, N. Y. Offices of the Association, 29 West 39th Street, New York City.

June 4-6—NEW MEXICO STATE FIREMEN'S ASSOCIATION. 8th Annual Convention (Combined with Firemen's Short Course), Deming, N. M. Secretary-Treasurer, Theodore A. Rosenwald, Albuquerque, N. M.

June 7—LANCASTER COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Elizabeth, Pa. Secretary, J. Harry Grube, Landisville, Pa.

June 9-11—SOUTH CAROLINA STATE FIREMEN'S ASSOCIATION. 25th Annual Convention, Beaufort, S. C. Secretary, R. S. Hood, Sumter, S. C.

June 9-11—NEW YORK STATE ASSOCIATION OF FIRE CHIEFS. 24th Annual Convention, Utica, N. Y. Secretary-Treasurer, Chief J. H. Golden, Fire Department, Cohoes, N. Y.

June 10-11—EASTERN ASSOCIATION OF FIRE CHIEFS. 3rd Annual Convention, Lord Baltimore Hotel, Baltimore, Md. Secretary, F. E. Soulé, Coatsville, Pa.

June 10-11—MINNESOTA STATE FIRE DEPARTMENT ASSOCIATION. 58th Annual Convention, Excelsior, Minn. Secretary, Chief Fred Pfaender, New Ulm, Minn.

June 10-12—OHIO FIRE CHIEF'S ASSOCIATION. 13th Annual Convention, Portsmouth, Ohio. Secretary, Chief Philip J. Hardy, Fire Department, Youngstown Sheet and Tube Company.

June 10-12—SOUTHERN NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. 35th Annual Convention, Long Beach, L. I. Secretary, Theodore W. Nass, Lindenhurst, L. I., N. Y.

June 11-13—MARYLAND STATE FIREMEN'S ASSOCIATION. 38th Annual Convention, Lord Baltimore Hotel, Baltimore, Md. Secretary, George R. Lindsay, Hagerstown, Md.

June 11-13—WISCONSIN STATE FIREMEN'S ASSOCIATION (Volunteer). 43rd Annual Convention, Plymouth, Wis. Secretary, E. Philip Mueller, Jefferson, Wis.

June 11-14—EASTERN WISCONSIN FIREMEN'S ASSOCIATION. Convention and Tournament, Plymouth, Wis.

June 13-14—DELAWARE COUNTY FIREMEN'S ASSOCIATION. 24th Annual Convention and Parade, Linwood, Pa. Financial Secretary, William E. Wunderlich, Lansdowne, Pa.

June 13-14—DAUPHIN COUNTY FIREMEN'S ASSOCIATION. 12th Annual Convention, Steelton, Pa.

June 16-20—SIX COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Danville, Pa.

June 17-20—SHORT COURSE ON FIRE PREVENTION, CONTROL AND EXTINGUISHMENT. 6th Short Course, University of Illinois, Champaign-Urbana, Ill. Address, Prof. C. C. Palmer, Director of Course, Architectural Bldg., at the University.

June 20-22—FOUR-COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Easton, Pa.

June 24-27—WISCONSIN SHORT COURSE IN FIREMANSHIP. 2nd Short Course at the State University, Madison. Address, Prof. H. E. Pulver, at the University.

June 24-25—SOUTHEASTERN ASSOCIATION OF FIRE CHIEFS. 3rd Annual Convention, Charlotte, N. C. President, Sherwood Brockwell, Insurance Department, Raleigh, N. C.

June 24-27—NEW ENGLAND ASSOCIATION OF FIRE CHIEFS. 8th Annual Convention, Hotel Berwick, Rutland, Vt. Meetings, Odd Fellows' Hall; Exhibits, Armory, Secretary-Treasurer, Chief John W. O'Hearn, Watertown, Mass.; Chairman, Exhibits, Chief Daniel B. Tierney, Arlington, Mass.; Traffic Manager, George F. Cobb, Boston.

July 3-5—COLORADO STATE FIREMEN ASSOCIATION. 14th Annual Convention and Tournament, Salida, Col. Secretary, Clinton Turnbull, 303 Jacobson Bldg., Denver, Col.

July 7-10—MICHIGAN STATE FIREMEN'S ASSOCIATION. 56th Annual Convention and Fire College, South Haven, Mich. Secretary-Treasurer, H. L. Williams, Ludington, Mich.

July 9-10—DELAWARE VOLUNTEER FIREMEN'S ASSOCIATION 10th Annual Convention, Georgetown, Sussex County, Del. Secretary, Sam H. Carson, Dover, Del.

July 14-15—MONTANA STATE FIREMEN'S ASSOCIATION. 39th Annual Convention, Missoula, Mont. Secretary-Treasurer, D. E. Moser, Bozeman, Mont.

July 16—NASSAU COUNTY FIREMEN'S ASSOCIATION. 25th Annual Parade and Tournament, Inwood, L. I., N. Y. Parade, 9:30 A. M.; Tournament, 1:30 p.m. Secretary, J. W. Sane, Glen Cove, L. I.; Chairman Tournament, Henry W. Buck, Westbury, L. I.

July 22-23—WESTERN NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. 30th Annual Convention, Rochester, N. Y. Secretary, Henry A. Clark, Batavia, N. Y.

July 29-31—INDIANA FIREMEN'S ASSOCIATION. 13th Annual Convention, Lafayette, Ind. Secretary, Clem Smith, Fire Headquarters, Terre Haute, Ind.

July 30-31—CENTRAL NEW YORK FIREMEN'S ASSOCIATION. 37th Annual Convention, Skaneateles, N. Y. President, C. W. McCray, Waverly, N. Y.; Secretary, T. J. Murray, Cortland, N. Y.

July 31-Aug. 1-2—CALIFORNIA STATE FIREMEN'S ASSOCIATION. 8th Annual Convention, San Francisco, Cal. Secretary-Treasurer, H. E. Strasser, 1171 Tenth Street, San Diego, Cal.

August—MAINE STATE FIREMEN'S ASSOCIATION. 3rd Annual Convention, Bangor, Me. (Date to be set later.) Secretary, Earl E. Pratt, Auburn, Me.

August—UTAH STATE FIREMEN'S ASSOCIATION. 23rd Annual Convention, Provo City, Utah. (Exact date to be decided later.) Secretary, Charles A. Canning, Midvale, Utah.

Aug. 6-7—CUMBERLAND VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 30th Annual Convention, Shippensburg, Pa. Secretary, C. L. Jacobs, Waynesboro, Pa.

Aug. 6-8—WASHINGTON STATE FIREMEN'S ASSOCIATION. 8th Annual Convention, Kelso, Wash. Secretary, H. S. Jenkins, Bellingham, Wash.

Aug. 12-14—WISCONSIN PAID FIREMEN'S ASSOCIATION. 23rd Annual Convention, Two Rivers, Wis. Secretary-Treasurer, William H. Schultz, Sheboygan, Wis.

Aug. 12-15—WYOMING STATE FIREMEN'S ASSOCIATION. 4th Annual Convention and Tournament, Caspar, Wyo. Secretary, Chief Justin H. Patrick, Laramie, Wyo.

Aug. 15-16—CONNECTICUT STATE FIREMEN'S ASSOCIATION. 47th Annual Convention, Pyramid Lodge, 1035 State St., Bridgeport, Conn. Secretary, D. W. Harford, 10 Chestnut St., South Norwalk, Conn.

Aug. 19-22—FIREMEN'S ASSOCIATION OF THE STATE OF NEW YORK. 58th Annual Convention, Nyack, N. Y. Secretary, Fred A. Davis, Drawer X, Fort Edward, N. Y.

Aug. 27-29—VIRGINIA STATE FIREMEN'S ASSOCIATION. 44th Annual Convention, Phoebus, Va. Secretary, E. K. Landis, Pulaski, Va.

Sept. 1-4—PACIFIC COAST ASSOCIATION OF FIRE CHIEFS. 37th Annual Convention, Oakland, Cal. Secretary, Jay W. Stevens, 1014 Merchants' Exchange Building, San Francisco, Cal.

Sept. 2-4—KENTUCKY FIREMEN'S ASSOCIATION. 11th Annual Convention, Paducah, Ky. Secretary, Capt. S. G. Render, 940 Starks Bldg., Louisville, Ky.

Sept. 2-5—DOMINION ASSOCIATION OF FIRE CHIEFS. 22nd Annual Convention, Port Arthur, Ont. Secretary, Chief James Armstrong, Kingston, Ontario, Can. Exhibit Space, Chief A. S. Kapelle, Stratford, Ont.

Sept. 9-11—ILLINOIS FIREMEN'S ASSOCIATION. 43rd Annual Convention, Peoria, Ill. Secretary, Assistant Chief Roy W. Alsip, Fire Department, Champaign, Ill. Exhibits, Chief Albert Herring, Fire Department, Murphysboro, Ill.

Sept. 9-12—INTERNATIONAL ASSOCIATION OF FIRE CHIEFS. 58th Annual Convention, Hotel Royal Alexandra, Winnipeg, Man., Canada. Recording Secretary, Chief James J. Mulcahey, Yonkers, N. Y.; Executive Secretary, Jay W. Stevens, 1014 Merchants' Exchange Bldg., San Francisco, Cal.; Chairman, Exhibit Committee, Chief Charles Alt, Fire Headquarters, St. Louis, Mo. Hotel Reservations, Chief D. A. Boulden, Winnipeg, Man.

Sept. 16-17—IOWA FIREMEN'S ASSOCIATION. 53rd Annual Convention, Boone, Ia. Secretary, Paul Soener, Independence, Ia.

Sept. 16-18—MASSACHUSETTS STATE FIREMEN'S ASSOCIATION. 51st Annual Convention, Pittsfield, Mass. Secretary, Daniel J. Looney, Room 1043, Old South Bldg., Boston, Mass.

Sept. 24-25—MISSOURI STATE FIREMEN'S ASSOCIATION. Annual Convention, Trenton, Mo. Secretary-Treasurer, M. J. Mulvoy, 3500 S. Grand Boulevard, St. Louis.

Oct. 7-9—FIREMEN'S ASSOCIATION OF THE STATE OF PENNSYLVANIA. 51st Annual Convention, Hotel Americus, Allentown, Pa. Secretary, Charles E. Clark, 411 Bellevue Avenue, Wayne, Pa.

Oct. 8-9—WISCONSIN STATE FIRE CHIEFS' ASSOCIATION. 2nd Annual Convention, Sheboygan, Wis. Secretary, Chief Arthur J. Rahn, Fire Department, Two Rivers, Mich.

Oct. 21-23—NEBRASKA STATE VOLUNTEER FIREMEN'S ASSOCIATION. 49th Annual Convention (2d in year), Scottsbluff, Neb. Secretary-Treasurer, H. A. Webbert, Kearney, Neb.

November—SONOMA COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Petaluma, Cal.

Ladder Truck Delivered to Clinton, N. Y.—A Buffalo ladder truck has been delivered to Clinton, N. Y.

Monroe Farmers Interested in Fire Protection—Many of the rural residents attended a meeting on fire protection held in Monroe, Wash.

Fire House to Be Erected in Yreka, Cal.—An attractive fire station is to be erected in Yreka, Cal., on land donated to the city.

Cos Cob Firemen Move Into New House—Firemen of Cos Cob, Conn., moved into their new home erected at a cost of $65,000. The cornerstone was laid last fall.

Mt. Carmel Chief Dead—A. E. Lennert, Chief of the Mt. Carmel, Ill., fire department since 1913 and a member since 1886, died as the result of heart disease. He was one of the oldest firemen in southern Illinois.

D. W. Peterson Opens Own Office—D. W. Peterson who for the past seven years has been selling Pirsch apparatus in Western New York and Pennsylvania has opened up his own office at 253 Falconer Street, Jamestown, N. Y. He is representing a number of fire department supplies and apparatus manufacturers.

El Paso to Spend $200,000 on Department—El Paso, Tex., will receive $200,000 from a bond issue for the improvement of the fire department. Two new stations will be built, one old station will be razed and replaced with a new building, $50,000 will spent on fire alarm improvements, and the city will purchase a 75-foot aerial ladder, one city service truck and four 750-gallon triple combination pumpers.

The Round Table

(*Continued from page* 446)

company and ambulance. Any one can be brought to the scene of an accident immediately. The Protective Company is trained to use an inhalator. The other departments also have trained crews.

Cris Noll, Chief, Poughkeepsie, N. Y.: The fire department handles inhalator cases but in case of auto accident, the police department and the hospital are called. In case of gas asphyxiation, drowning or carbon monoxide or other gas poisoning, the fire department is usually called. We respond with a first aid crew and equipment.

Henry R. Taft, Chief, Norwich, Conn.: The fire department handles all inhalator cases except those of the gas company. The type accident dictates whether the fire department or the ambulance is called. All of the men at fire department headquarters are trained in handling first aid cases.

Wm. Hill, Chief, Hammond, Ind.: The police department looks after inhalator case, and they are called at times of accident. We have no trained first aid crew.

John Ely, Chief, Champaign, Ill.: The fire department handles inhalator cases, and they are called in case of accident.

There is a first aid crew on both shifts to answer such cases. The fire department truck is used.

Joseph Waidelich, Chief, Topeka, Kans.: Inhalator cases are cared for by the department while accident cases are looked after by the hospital. The fire department has a trained crew for emergency cases.

Elmer J. Brown, Chief, Binghamton, N. Y.: Both the fire and police departments handle inhalator cases. Accident calls go to the police department. The fire department has a very completely equipped squad wagon manned by a crew trained in first aid work.

August Gerstung, Chief, Elizabeth, N. J.: Fire and police departments and the hospital handle inhalator cases, and accident cases go to the hospital. Members of truck companies are trained in first aid work.

James M. Casey, Chief, Cambridge, Mass.: The fire and police departments carry lungmotors. The fire department and sometimes the police department are called in case of accident. All firemen are trained in the Prone Method of resuscitation.

D. W. Flynn, Chief, Great Barrington, Mass.: There is no special department to handle inhalator case. In case of accident an emergency call is sent for doctors and the police department.

Charles Andrews, Chief, Ann Arbor, Mich.: The fire department handles inhalator cases and is called in case of accident. We have a trained first aid crew.

R. D. Hinkson, Clerk, Indian Orchard, Mass.: The police handle inhalator cases. In case of accident, sometimes the fire department is called but generally the police department. We have no trained crews.

Thomas A. Qualey, Chief, Medford, Mass.: This is the only department that has an inhalator. The police department is called on all accident cases as they have the only ambulance in the city.

The department does not maintain a regularly trained crew for every member of the department is trained in such work by a system of house drills. Each member is questioned on first aid work and also demonstrates how to do it. The plan has worked out well.

G. O. Evans, Chief, Vincennes, Ind.: Inhalator cases are cared for by the fire department and it also responds to accidents. We have a first aid crew.

Thomas F. McNamara, Chief, Wellesley, Mass.: The police and fire departments cover inhalator cases. The police and sometimes the fire department handle accidents. We have a trained first aid crew.

Joseph Asay, Chief, Red Bank, N. J.: The police department has an inhalator. At present the hospital takes care of accident cases, responding with the police ambulance. The fire department is forming a first aid squad and as soon as qualified will take care of all first aid cases.

Fred J. Myers, Chief, Toledo, Ohio: The police care for inhalator cases. The fire and police departments and ambulances respond to accidents. The fire department is considering the formation of a first aid crew, although we have none at present.

Joseph Leeds, Chief, Atlantic City, N. J.: The beach patrol or lifeguards handle inhalator cases: accident cases by the hospital. We have a rescue squad.

H. J. Callahan, Chief, Ft. Dodge, Ia.: The fire department is in charge of inhalator cases. The police department has an ambulance and the hospitals do not. Cases requiring an inhalator are directed to either the fire department or the local gas and light company. All firemen are trained in first aid work. The apparatus carry first aid cases. Certain men are designated to respond with the inhalator.

Thomas F. Burns, Chief, Bridgeport, Conn.: The fire department handles inhalator cases. We have no regularly trained first aid crew.

J. N. Sullivan, Chief, Utica, N. Y.: The fire department looks after inhalator cases. Most of our accident calls have come from physicians but we have had some from private citizens and from hospitals. The calls are direct to the fire department.

George Layton, Chief, Savanna, Ill.: The fire department is called in case of accident, but we do not have a regularly trained first aid crew.

Chief, Marietta, Ga.: The hospital handles inhalator cases. In some cases the fire department is called and the hospital for others. The department has an excellent first aid man but most of the cases are directed to the hospital unless the department happens on a call. It is later turned over to the hospital.

Bert Seay, Chief, Miami, Okla.: The fire department handles inhalator cases. We do not have a regularly trained first aid crew.

Answers to Previous Question

Thomas J. McCarrick, Chief, Revere, Mass.: I believe that any aggressive chief will and should endeavor through the medium of the press to seek fair and unbiased publicity for his organization. However, in some instances, group and individual credits, unjustified, are given for valor. For instance, sometimes a person carried down a ladder could be carried down a flight of stairs with greater safety. Any genuine outstanding act should be fully recognized through the press and it is the duty of the chief to impart fair and unprejudiced information to the press concerning acts of valor and general department activities.

I believe that the community should be advised from time to time of the various activities and functions of all municipal departments. It is expected that ordinary discretion will be exercised in dispensing news so that some individual might not be embarrassed or the moral of the department lowered. Wholesome and practical publicity will undoubtedly create a most favorable impression upon the minds of the people.

The press is perhaps the greatest known organ of news and it is hardly likely that any public official will berate the powers of the press. The press in this sec-

Lumber Yard and Box Factory Destroyed in New York

A spectacular fire seen from many parts of New York city destroyed a lumber yard, a box factory and part of a warehouse. The cause of the fire is unknown.

tion has never refused to fully recognize the valor of firemen and has never taken an adverse stand on matters of legislation that would improve the working conditions of the uniformed body.

J. H. Harrison, Chief, Brunswick, Ga.: I believe that frequent write-ups in local newspapers create a better understanding of fire department matters. My experience with newspapers has been very satisfactory.

C. Craig, Chief, Owasso, Mich.: We attempt to get department publicity and frequent write-ups in local newspaper tend to help. My experience with newspapers has been excellent.

Jos. L. Murphy, Chief, Kingston, N. Y.: I am of the opinion that publicity is overdone in many cases. To my mind, efficiency in the fire department is its best press agent. However, the newspapers here are always willing to print anythnig for the betterment of the fire department.

Jack M. Byers, Chief, Hagerstown, Md.: We do try to get all the publicity we can for the department. Frequent write-ups are certainly a help if they contain facts that are correct.

I personally believe the newspapers rely too much on what they hear and do not go direct to those concerned to secure the actual facts. This applies mostly to small fires, which in the end involve quite a bit when they are summed up.

Martin Juhl, Chief, Helena, Mont.: We do not attempt to get publicity for the department, but are of the opinion that articles or write-ups in the newspapers are a great help.

Our papers have been reasonably friendly and have published public addresses made by the head of department.

Wm. J. Johnstone, Chief, Marquette, Mich.: Write-ups in local newspapers are certainly of assistance in keeping the public informed regarding fire department matters and it is for this reason that we try to secure publicity.

The newspapers here have been very useful in fire prevention work and also in pointing out to their readers common fire hazards.

J. Roberts, Chief, Tucson, Ariz.: Articles and news items are certainly an excellent means of keeping the public informed regarding fire fighting matters, and we have been fortunate in receiving cooperation from the newspapers.

Claud Summers, Chief, Norman, Okla.: While we do not attempt to go after publicity ourselves we have the cooperation of the local newspapers. They try to help us wherever possible. Yes, articles and write-ups are of benefit to the department and also to the public.

W. S. Minter, Chief, Long Beach, Cal.: We do seek publicity for the department, but not for individuals. This certainly helps the department. So far we have received excellent cooperation from the newspapers.

New York Tests Its New Pumpers

The New York Fire Department has rigid tests that each new pumper must pass before it is accepted for use. Three pumpers are here shown undergoing the tests at the 55th St. dock, North River. Water is pumped from the river and then directed back again.

Del-Mar-Va Firemen Hold Convention

Many well-known chiefs attended the first annual convention of the Del-Mar-Va Firemen's Association held in Cambridge, Md., on May 14. Various topics of interest to firemen were discussed including proposed state legislation, fire inspection laws, rural fire hazards and protection, right of way, and first aid work.

Among those present were Chief Ross B. Davis, of Philadelphia, Chief August Emrich, of Baltimore, Md., Chief William J. Lutz, of Wilmington, Del., and Chief F. E. Soulé, of Coatesville, Pa.

Chief Emrich urged all to attend the annual convention of the Eastern Association of Fire Chiefs and to especially hear the talks by Chief Greenfield, Arlington, N. J., President of the association, Dr. Harry M. Archer of the New York Fire Department, and Fred Shepperd, Managing Editor of FIRE ENGINEERING. Talks were also made by Dr. John McGinnity of the Board of Fire Commissioners, Baltimore, Md., and A. J. Bargagni of the Washington, D. C., training school. An interesting demonstration in first aid and rescue work was given by Commodore W. E. Longfellow, Assistant National Director, First Aid and Life Saving, American Red Cross.

President W. W. Pettyjohn, of the Delaware Volunteer Firemen's Association, and Chief V. A. Simmel, President of the Maryland State Firemen's Association, also attended.

At 6 p. m. there was a parade of visiting firemen headed by the cars of Chief Emrich and other officials. The convention closed with a free dance in the state armory. The 1931 meeting will be held in Smyrna, Del.

The new officers are George R. Stevenson, Smyrna, Del., President; C. W. Milligan, Cape Charles, Va., First Vice-President; Fred A. Grier, Jr., Salisbury, Md., Second Vice-President; Wm. Draper Brinckloe, Easton, Md., Treasurer, and J. Emory Parks, Cambridge, Md., Secretary.

Out of the eighty companies on the Del-Mar-Va peninsula, half are members of the association.

Westchester Chiefs to Hold Dinner

The Fire Chiefs' Emergency Plan, an organization of the heads of Fire Departments and other fire officers of the various cities and villages of Westchester County, N. Y., is to hold its first annual dinner at the Westchester Manor White Plains, N. Y., on May 28. The election of officers for the Plan will take place on this occasion.

Apparatus Delivered to Centuria, Wis.—New fire apparatus has been delivered to Centuria, Wis.

Milwaukee Moves Fire Companies—Five fire companies and a battalion chief's headquarters in Milwaukee have been moved to remodeled quarters. Within a month the old quarters will be torn down and construction started on a new station.

Protection Wanted for Blaine, Wash.—A movement has been started by Blaine, Wash., for fire protection for the adjoining rural territory. The city is willing to house the rural apparatus without cost, but where necessary, the rural apparatus might be used, as a return for the service.

Paul Roth Named Chief of Beloit, Wis.—John E. Nygren, head of the Fire Department in Hygren, Ill., for twenty-two years and in the department forty years, has retired. Assistant Chief Paul Roth has been named head of the department and Robert Moses has been appointed Assistant Chief.

T. P. Treadwell Chief of Ft. Collins, Col.—T. P. Treadwell, formerly Chief of Fire Department in Deer Trail, Col., a community of 175 persons is now head of the Fire Department in Ft. Collins, Col., of 8,952 population. A new drill tower is being erected, and the fire station is being remodeled.

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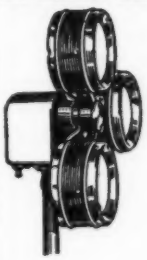

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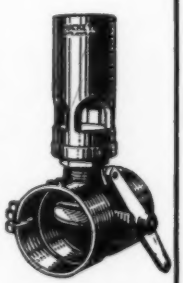

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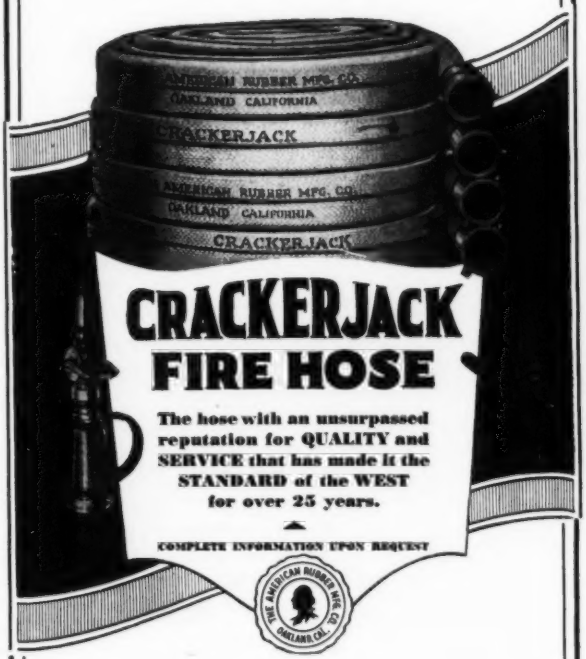

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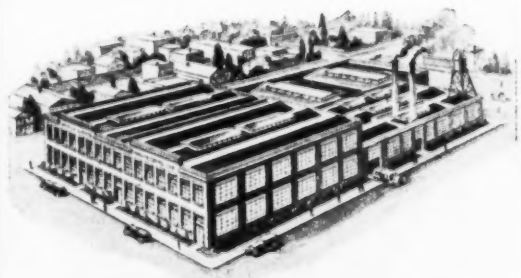

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FIRE DEPARTMENT ACTIVITIES

Logan, O., Raising Funds—A fund is being raised in Logan, Ohio, for the purchase of fire apparatus.

Saulte Ste. Marie to Buy Ladder—Saulte Ste. Marie, Mich., is to buy a ladder truck.

Alexandria, Ind., to Buy Apparatus—Alexandria, Ind., is expecting to purchase fire apparatus soon.

Wood Appointed Chief of Clyde—Frank Wood has been appointed permanent Fire Chief of Clyde, N. Y.

Moores Chief of Hope, N. D.—C. W. Moores has been named Chief of Hope, N. D.

Apparatus Delivered to Easton, Ohio—Fire apparatus has been delivered to Easton, Ohio.

Bay Point, Cal., to Buy Apparatus—Bay Point, Cal., is to purchase fire apparatus.

La Habra, Cal., to Buy Apparatus—La Habra, Cal., is planning to purchase fire apparatus.

Barbourville, Ky., May Buy Apparatus—Barbourville, Ky., may purchase fire apparatus at an early date.

Firemen to Meet in Petaluma, Cal.—The semi-annual meeting of the Sonoma County Firemen's Association will be held in Petaluma, Cal., some time in November.

Harlingen, Ill., to Erect Fire House—Construction will start soon on a new fire station for Harlingen, Ill. An aerial ladder truck and a pumper have been ordered.

Department to Be Organized in Kittanning—The civic association of Kittanning, Pa., has taken steps to organize a volunteer fire department.

Western Pennsylvania Firemen to Meet in June—Plans are being made for the June conference of the Western Pennsylvania Firemen's Association to be held near New Brighton.

Truro, Mass., to Buy Apparatus—Two pieces of fire apparatus are to be purchased—one for Truro, Mass., and the other for North Truro.

Hoosick Falls, N. Y., Considers Fire Alarm—Hoosick Falls, N. Y., is considering the installation of a new fire alarm system.

N. Hoosick to Buy Fire Apparatus—A drive may be started in North Hoosick, N. Y., for the purchase of chemical apparatus.

Wilmington Firemen May Get More Pay—There is a movement in Wilmington, Del., to grant members of the fire department an increase in pay.

Dallas Chosen as Convention City—The Southwestern Fire Chiefs' Association selected Dallas as the place for the 1931 convention.

Arnolds Park, Ia., Buys Apparatus—A 300-gallon pumper has been purchased by Arnolds Park, Ia. It will be placed in service the latter part of the month.

Canon City to Buy a Pumper—Canon City, Col., will buy a triple combination pumper fitted with a forty-gallon chemical tank.

Williamsport, Pa., to Have New Station—An old fire station erected in Williamsport, Pa., in 1870 will be replaced by a new building.

S. Salem, Ore., to Have Fire House—A fire station will be erected in South Salem, Ore. A fifty-box fire alarm system will be installed some time this year.

Lebanon, Pa., to House New Apparatus—A special program has been arranged for May 24 in Lebanon, Pa., when the new fire apparatus will be officially housed.

Olivia, Minn., Votes to End Outside Runs—The council of Olivia, Minn., has voted to prevent the fire apparatus from leaving the village limits.

London, O., to Buy Apparatus—London, Ohio, is considering the purchase of apparatus to replace its present old one.

Organize to Prevent Forest Fires—The Aiken County Forest Protective Association has been formed in Aiken, S. C.

Eaton, O., Celebrates Apparatus Arrival—A community celebration was arranged to mark the arrival of new fire apparatus in Eaton, Ohio.

Murray City, O., to Buy Apparatus—A committee in Murray City, Ohio, has been empowered to purchase fire apparatus.

Work Started on Weymouth Fire Station—Construction has started on the $62,000 fire station for Weymouth, Mass. The building will be completed within 180 working days.

Antioch Requires Fire Extinguishers—The council of Antioch, Cal., has passed an ordinance requiring all places of business within the fire limits to have fire extinguishers.

Fire Alarm Being Installed in Anderson—Work has been started on the installation of a fire alarm system in Anderson, S. C.

Fire Apparatus of Keokuk, Ia. Crashes Into Tree—Three firemen were injured when the pumper on which they were riding crashed into a tree so that a collision with a bus could be avoided.

Johnstown, Pa., has Fireworks Ordinance—An ordinance has been introduced in Johnstown, Pa., to regulate the sale, discharge, or exploding of fireworks in the business section of the city.

Ashtabula Chief Asks for Increase—Chief Warren, of Ashtabula, Ohio, has petitioned for an increase in salary from $180 to $210 a month so as to bring his wage scale up to that received by the police chief.

Large Parade Planned for Dauphin Firemen—A large parade has been arranged for the Dauphin County Firemen's Association convention that will be held in Harrisburg, Pa., June 14.

New Rescue Truck for Newark, N. J.—A new rescue car has been placed in service in Newark, N. J. It is equipped with gas masks, smoke helmets, inhalators, first aid kits, searchlights, blankets and so forth.

Goldsboro, N. C., to Enlarge Department—Six additional firemen are to be added to the department of Goldsboro, N. C. The city recently purchased two pieces of fire apparatus and has extended its fire alarm system.

Sidney, O., Chief Succumbs at Fire—Chief George H. Hume, of Sidney, Ohio, died while engaged in fighting a fire in a residence. He was chief of the department for twenty-six years and a member of the department for thirty-three years.

N. J. Volunteer Chiefs Elect Officers—Henry Lowther of Elizabeth has been elected President of the New Jersey Volunteer Fire Chiefs' Association. Other officers are Frank Feirer, Roselle Park, Vice-President; Harry Simmons, Treasurer, and Anton J. Zirwes, Secretary.

Pocomoke City, Md., Buys Pumper—Pocomoke City, Md., has purchased a 1,000-gallon pumper. With the new purchase the city will have two 1,000-gallon pumpers, two chemical cars, and a 500-gallon pumper attached to the motor of a hose truck.

Fire Losses Increase in North Carolina—During the first three months of the year, fire losses in North Carolina have increased $500,000. For the first three months of 1930 the losses were $2,537,405. The number of fires for this period has increased from 802 in 1929 to 863. According to the report, most of the increase occurred in March.

Hogston Issues Fireworks Warning—Alfred Hogston, State Fire Marshal of Indiana, has warned the people concerning the items known as Radio Salute, K. O. Flash Salute, O. K. Flash Salute and Victory Flash Salute. The fireworks mentioned are powerful enough to seriously injure any one near the exploding salute.

Merchants Back Indianapolis Pension Fund—Five large business organizations have united in a plan to raise money in Indiana for the pension fund so that all money collected will go to the fund. This year the money is being raised by direct appeal while in previous years it was raised through entertainments.

House Burns for Lack of Fee—A fire company of a Nashville, Tenn., suburb responded quickly to a fire alarm. As they were preparing to fight the blaze, an officer shouted, "Just a minute—he's not a subscriber." So the equipment was packed away and the company moved. According to the rules of this department, the firemen had no authority to fight fires for non-subscribers.

PROPOSED IMPROVEMENTS

Springfield, Mass.—New plans for new Pine Point fire station have been approved by Fire Commissioners and bids are to be received May 21.

La Verne, Calif.—H. E. Belcher, Chief of Fire Dept., recommended that some action be taken on purchase of new fire truck and fire hose, according to reports.

Puyallup, Wash.—Funds are to be included in the 1931 budget for construction of proposed bungalow fire station, according to reports.

Lowell, Mass.—Mayor Thomas H. Braden, after recent inspection of fire department recommended the purchase of two new pieces of fire apparatus to replace present equipment.

North Tonawanda, N. Y.—Common Council ordered fire board to call for bids for furnishing a new 750 gal. pumper for the Sweeney Fire Hall, according to reports.

Shadyside, Ohio.—Village Council considering purchase of new piece of fire apparatus, according to reports.

Canton, Ohio.—Reports state a bond issue of approximately $100,000 may be recommended by finance committee of council for the repair of fire stations, the erection of new signal system building and recabling and new equipment, and additional fire hose for the department. Robert O. Mesnar, Chief.

Oconto, Wis.—Fire Chief Bert Harris making plans for financing purchase of new piece of fire apparatus, according to reports.

Green Pond, N. J.—Fire department to be organized here, according to reports.

For Sale

1-8 Circuit combination Fire and Police signal Switchboard.
1-4 Circuit Telephone and Police Signal desk.
1-8 Circuit Battery Rack
Approximately 45 Gamewell Fire Alarm boxes. 15 Police Signal Boxes.
200 Battery Jars and Covers
All the above equipment just cut out of service and can be purchased at a mere trifle of its original cost. Write or telegraph.

Hobart Bradstreet,
Dir. of Public Safety,
Steubenville, Ohio

5-28

Proposals for Fire Apparatus

BOROUGH OF FAIRVIEW, N. J.

Bids received until June 3, 1930.

Sealed bids, endorsed, "Bids for Triple Combination Fire Apparatus" will be received by the Mayor and Council of the Borough of Fairview, N. J., at their meeting to be held at Lincoln School, corner of Day and Anderson Avenues, Fairview, on Tuesday Evening, June 3, 1930 at 8:30 o'clock (Daylight Saving Time) and no bids will be considered that are presented after said stated time.

The bids to be received are for the purchase of a Triple Combination Fire Apparatus with piston pump (750 gals. and 1,000 gals. capacity) hose carrier and booster tank, together with an allowance for the present Packard fire truck now being used by the borough, which may be seen at the Grandview Fire House, corner Grant and Garfield streets, Fairview, N. J., together with equipment and appliances.

Certified check for ten per cent of the bid must accompany same.

The Mayor and Council of the Borough of Fairview reserves the right to reject any and all bids.

GEORGE EBEL, JR.,
Borough Clerk,
Borough of Fairview, N. J.

5-28

Massachusetts Forests Closed

As a result of the large number of forest fires that have occurred Governor Allen, of Massachusetts, has closed the woods to the public and has suspended the fishing season. The Governor's proclamation reads:

"Because of the continued drought and the greatly increased danger to the forests and woodlands of Massachusetts, and the fact that the record of forest fires for this year to date is over 2,300 fires, with more than 40,000 acres burned over, with a damage which is impossible to estimate at this time, and because at present there is an average of 100 fires daily, with every indication that this dry period will continue with high winds, I hereby proclaim that under Chapter 249 of the Acts of 1925, any open season on fish, established by Chapters 130 and 131 of the General Laws of Massachusetts, shall be suspended at midnight tonight through the continuance of the present menace by fire to the woodlands of the Commonwealth and until a proclamation shall be made for the purpose of reopening the fishing reason, at which time additional days will be added to the fishing season to take the place of those lost by the closing of the season under this proclamation."

Westfield, Mass., to Buy Ladder Truck—Westfield, Mass., will purchase a Seagrave combination ladder and pumper. The two units will be delivered in about ninety days.

Fire Boat Crash Charged to Negligence—A committee that investigated the accident when the fire boat of Tacoma, Wash., crashed into the Tacoma Port Piers, April 21, stated that the crash was due to negligence on the part of the pilot and engineer, and lack of communication between the pilot house and engine room.

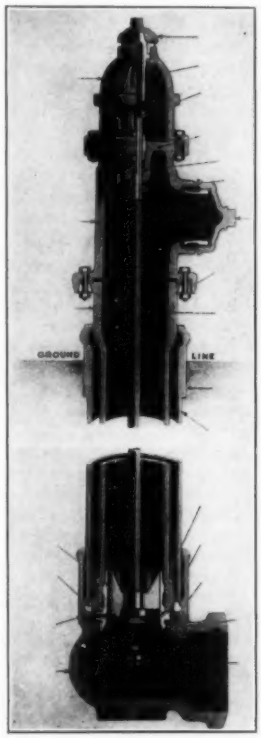
Hydrant Provided with Revolving Head

An improvement in the Mathews hydrant, shown in the illustration herewith, has been introduced by R. D. Wood & Co., Philadelphia, Pa. A feature of the new design is the revolving head which makes it easy to face the nozzles in any direction without disturbing the barrel. All that is necessary is to loosen the bolts in the swivel clamping ring.

The hydrant is designed so that the barrel may be replaced without digging. Four sturdy lugs have been cast on the outside of the barrel at the base and a tube wrench slips down over these lugs to unscrew the barrel.

To prevent rain and sleet from seeping down and freezing around the operating nut, there is a malleable iron shield-operating nut that fits down over the operating nut and is secured by a brass screw in the oil hole. The stuffing box plate is cast integral with the nozzle section so that there will be no strain on the heat bolts when the hydrant is open.

The design of the hydrant has been changed to produce a stronger hydrant that will be better able to withstand the many traffic accidents and which can be replaced without breaking the pavement. There is a bronze stop nut on the hydrant stem to prevent the bottom of the stem striking the elbow and buckling in the event that undue pressure is exerted in opening the hydrant.



Section of New Mathews Hydrant

Radio for Fire Boats Authorized

The Federal Radio Commission has granted a construction permit to the New York Fire Department to operate a station of 1,596 kilocycles and 400 watts power, with twenty-four hours intermittent service. The station will be used for communication with the city's fire boats.

Deputy Chief John McElligott, head of the marine division, said that radio equipment would result in great saving in the operation of fire boats. Although no city appropriation has been made for equipment of the city's fleet of ten boats, the Western Electric Company has installed experimental sets on the John Purroy Mitchel and in Deputy Chief McElligott's office at the Battery. Oral communication will be used instead of code.

If experimental tests prove successful, the Board of Estimate will be asked for funds to provide each fire boat with similar equipment.

Gamewell Opens Pittsburgh Office

To better serve Pennsylvania and West Virginia, the Gamewell Company has opened an office at 1424 Park Building, Pittsburgh, Pa. This new office will be provided with a trained sales force and will be able to handle service work.

Department and Other Reports Received

Elizabeth, N. J., Fire Department—Twenty-eighth annual report of the Board of Fire Commissioners with reports of the officers in charge of the various fire department branches; fifty-seven pages and cover.

Wilmington, Del., Fire Department—Annual report of Chief William J. Lutz; seventy-eight pages and cover.

Indiana State Fire Marshal—Annual report of the state fire marshal of Indiana; ten pages and cover.

Hamilton, Ont., Fire Department—Fifty-first annual report of the chief engineer of the fire department; fifteen pages and cover.

The Clark Inhalator

automatically and unfailingly delivers all the gas called for by the respiration of either one or two victims.

When giving the advanced (7%) treatment, this volume may exceed 60 litres a minute. With this excessive demand coming even from two patients, the supply in a "Clark" never fails and **NO GAS IS WASTED**

The Clark Inhalator has been Tested and Approved by the Committee on Resuscitating Apparatus for the American Gas Association. This official approval is for the use of the Inhalator on either one or two victims.

Give the victim every chance. The "Clark" does it.

McDonald Engineering Corp.
220 Varet Street Brooklyn, N. Y.

Minimize Water Damage · Reduce Insurance Rates

Shuredry

Waterproofed

Salvage Covers

City of Charleston
WEST VIRGINIA

Nov. 16, 1929

Fulton Bag & Cotton Mills.
Atlanta, Ga.

Gentlemen:-

The "SHUREDRY" salvage covers I purchased from you some time ago are doing just what you recommended them to do. They have paid for themselves several times in reducing the water damage.

I believe they are one of the most important things in a department with the largest saving, and the smallest purchase cost.

Write for Samples and Prices

Fulton Bag & Cotton Mills
St. Louis Atlanta Dallas
Minneapolis Brooklyn New Orleans Kansas City, Kan.

The High Efficiency of HALE Rotary Pumps is due to:

1 The form of the patented Rotor Tooth.
2 Automatic Packing.
3 Four bearing pump shafts.
4 Stainless steel pump shafts.

The design of Hale pumps has been perfected through fifteen years of active experience, and has resulted in a rugged, highly efficient product.

HALE FIRE PUMP CO., INC.
CONSHOHOCKEN, PA.
Manufacturers of Rotary Fire Pumps.

There Can Be No Question of the Proficiency of the

Modernized "Mathews" Fire Hydrant

To Meet the Needs of Today And the Increasing Demands of Tomorrow!

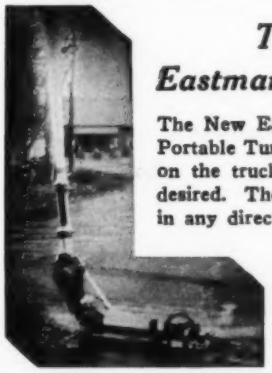
What will the modernized "Mathews" Fire Hydrant do that other hydrants won't do? How has it been improved? What changes have been made in its design? Why? What are its unique features?

Question marks now—all of them. But not for long! Those of you who attend the Water Works Convention will see this radically improved hydrant—making its first public appearance at that time.

Visit the "Unveiling" in Sections 56 & 57 at the Water Works Convention

R. D. Wood & Co.

PHILADELPHIA, PA.
A Better Product — Giving Better Service at No Price Increase



The New Eastman Deluge Gun

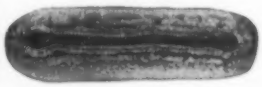
The New Eastman Deluge Gun is a Portable Turret Pipe that can be used on the truck or ground, as may be desired. The stream can be operated in any direction by one man.

Samuel Eastman Co.
Concord, N. H.

BI-LATERAL FIRE HOSE

THE BI-LATERAL FIRE HOSE CO.

Canal St. Station
110 North Franklin St.
Chicago, Ill.



The only change made in constructing the rocker lug coupling is
1. That is must be made of the very highest grade metal composition.
2. Adding a little more of the bronze metal to each side of the pin lug so that the couplings will ride without catching.

If this is not an improvement, why?

The Bi-Lateral Fire Hose Co. is using the rocker lug coupling as standard equipment because it is better for the hose and makes a fire department more efficient.

12,000 gallons of water displaced per hour with this siphon.

15 foot lift, 40 pounds pressure at siphon.

3,000 gallons of water used.

15,000 gallons gross, 12,000 gallons net.

A protection to the pumper.

30-Day Free Trial. Write for circular. Over 400 in service.

P-B PRODUCTS CO., Inc.
2155 Blendon Pl., St. Louis, Mo.
D. E. Parks, Pres.

EDDY
Fire Hydrants

Are given preference by so many fire protection and water works men because they know that more than half a century of experience go into their manufacture and they embody valuable and exclusive features.

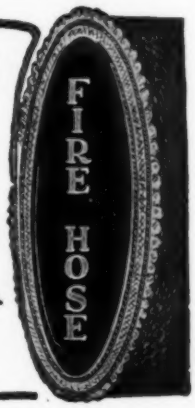
Write for the Facts

EDDY VALVE CO.
Waterford, N. Y.
James B. Clow & Sons, Chicago Agents

Baker Fabric

Not a single-jacket hose, nor yet a double — but a mass-woven jacket combining the flexibility of the one with the strength of the other. Write for details.

MANUFACTURED EXCLUSIVELY BY
HEWITT - GUTTA PERCHA
RUBBER CORPORATION
BUFFALO, N. Y.
(Also makers of single and double jacket hose)
"Territories Available"



BE SURE TO SEE

The Smith **INDIAN** Fire Pump *at the* **New England Fire Chiefs' Convention!**

HEAVY BRASS PUMP
5 GALLON TANK
WITH LARGE BRASS STRAINER AND BRASS COVER

Used and endorsed by rural and local departments everywhere. Quickest, most economical way to extinguish grass, awning or roof fires. Write for literature.

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412 Main St., Utica, N. Y.
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G

The new Rensselaer Catalog "G" is now ready for distribution. Officials desiring the latest information on RENSSELAER VALVES and COREY HYDRANTS are invited to fill in and mail the coupon below.

RENSSELAER VALVE CO.,
TROY, NEW YORK.

Send Catalog "G" to

Name .....
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Brush Fires and Backaches

(Continued from page 442)

of ridges afford excellent points for making a stand against fire advancing up canyons. Fire will burn quickly toward the top of a hill, but it burns very slowly going down the other side due to the breeze likely to be encountered, striking the hill from the other side and

A Conspicuous Example of the Value of Fire "Breaks" or Barriers

The above illustration shows one of the recent New Jersey brush fires stopping at barriers provided by concrete highways. This photo illustrates very vividly the value of roadways as barriers in checking the progress of grass or brush fires.

driving the fire upward from the top of hill. If the line of defense can be selected along the ridge of a hill, this is the ideal place to make a definite stand. It may be necessary to permit quite a bit of ground to be burned over before the fire reaches the barrier constructed along the hillside or the area back-fired, but it is a question of losing a little to save a lot. Indiscriminate back-firing should not be performed, however. Don't choose a point too far in advance of the fire if there's a good chance of making a stop much farther down.

After the line of defense has been selected, then immediately clear the ground to provide a barrier and start back-firing.

Occasionally roadways may be encountered, and they assist materially in doing quick work, particularly if they run in the right direction. They afford excellent barriers and due to their known position as well as their passability, they will aid materially in doing effective work.

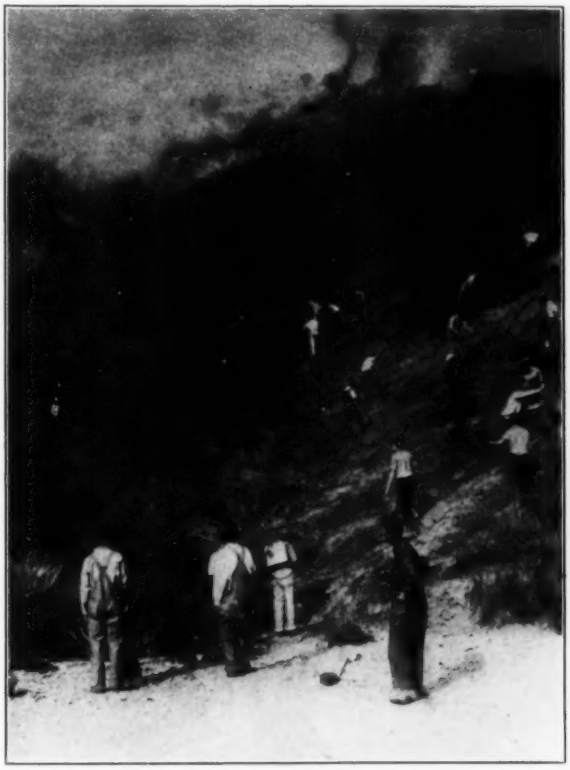
It is unnecessary to add that men working in the line of a fast traveling fire up through a canyon would have to take a lot of punishment. But precautions must be observed in order to avoid jeopardizing the lives of the men. If it becomes evident that there is a possibility of the fire getting past the back-fire section and cutting off any of the men, they should be withdrawn to a new line of defense.

The above procedure in fighting brush fires has proven to be very effective. While there may be other methods of handling such fires, there is considerable doubt as to whether they would be more efficient than the procedure outlined above.

After the fire is under control, then very careful inspection must be made to make sure that fire has crossed the barrier at no point, nor is in danger of crossing it. Patrols should be established to travel between the burned and unburned areas for a period of at least twelve hours after the fire is out to make sure that it will not re-ignite. Twelve hours will give sufficient time for any material, such as stumps, logs, etc., to become reduced to ashes and thus afford no further threat of extending the fire.

Patrols should make it a point to force well into the burnt area and material, such as logs, stumps, etc., which may be burning near the barrier. This precaution is necessary in the event that a breeze blows up and carrier sparks from the burning material over to unburned areas. In dry weather patrols may well be established for even more than twelve hours. Some fire departments consider it necessary to patrol the barrier line for twenty-four hours after the fire has been brought under control and overhauling operations are completed.

In conclusion, it may be said that there are but two methods of handling brush fires—extinguishing the fires by smothering, or quenching them, by the use of water, dirt, wet bags, etc., and letting the fires burn themselves



Where Plenty of Men and Elbow Grease are the Essentials in Building a Barrier for a Large Advancing Fire

Over 3,200 fire fighters put up a stiff battle at this brush fire which occurred near Griffith Park, near Los Angeles, and they were successful in checking the rush of advancing fire. Note the width of the area being cleared off, and also the hilly nature of the land over which the fire is traveling.

out by depriving them of any further fuel. It is the latter classification in which the methods described above would fall—back-firing an area to impose this area between the advancing fire and the unburned section.

Recent Court Decisions

(*Continued from page* 440)

Because of these instructions, and because of the danger, the firemen failed to throw water upon the fire for 20 or 30 minutes, and until the current had been turned off from these wires. The result of this delay was the destruction of the building and of its contents by the fire.

The factory owner sued the electric company for damages in an amount equal to the value of the building. The lower Court held the electric company not liable, but the higher Court reversed this verdict, stating the following important law:

"It is a serious matter to shut off the lights of a city and close down the electrically run plants. On the other hand, the deprivation of lights in a few houses for a short time would work but little inconvenience. Under some circumstances there may be a duty of such companies to cut off the current until the danger is removed upon receiving notice that a wire, carrying a dangerous current of electricity, is down in a public street or alley. . . . We think that there is an implied duty of an electrical company, which carries on overhead wires a voltage known to be dangerous to anyone coming in contact with its wires, and which maintains such wires in a city or town and near to buildings used for business or residence, to anticipate that fires may occur in such buildings and that it owes a duty to the owner of such a building to provide and use reasonable means whereby the electrical current may be cut off, after due notice is given to it that there is a danger from the wires to firemen who are seeking to extinguish the fire, when the cutting off of the current would be consistent with the practical operation of its business."

Failure to Pay Pension Assessments

Although a state firemen's pension law provides that municipal employes shall pay certain specified assessments before and after retirement, to be collected by a municipal officer, the fireman and his dependents are entitled to the pension if the municipality neglects to collect the assessments.

For example, in Whalen vs. Pension Commission of Firemen's Department of Atlantic City, 147 Atl. 647, it was disclosed that a state law provided:

"The widow of every retired member of such fire department, who, while a member of such department having paid into the fund the full amount of his annual assessments or contributions and continued to do so after his retirement until his death, shall, so long as she remains unmarried, receive a pension equivalent to one-half of the pay of the deceased husband at the time of his retirement, not exceeding $1,000."

A member of the department for 24 years was legally retired from service. At the time of his retirement he was receiving $1,800 per annum. From the time of his retirement until his death he received an annual pension of $900. During his employment with the municipality there was deducted from his pay, by the disbursing officer of the city, one per cent of his salary. After his retirement, no moneys were deducted from his pension, nor were any moneys voluntarily paid as a contribution by him. Upon his death no pension was paid to the widow, although written application therefor in accordance with the regulations governing the pension commission was made and denied by the commission.

The widow sued for the pension, and the counsel for the city defended the suit on the grounds that no money was deducted from the pension to pay the annual assessment. However, it is interesting to observe that the higher Court held the widow entitled to the pension, saying:

"We regard the contention as unsound. In order to create a fund from which pensions should be paid, this law directs that there shall be deducted, from every payment of salary to such member of the police and fire department in such municipality, certain percentages of the amount thereof predicated on the years of service; that the municipality shall raise by taxation and pay into the fund an amount equal to four per cent of the total salaries of the police and fire departments, and that to these moneys there shall be added all fines imposed on the members of the department, all moneys donated, and all moneys deducted from salaries by reason of loss of time or absence, and one-half of all rewards. . . . There is no percentage or sum of money that the statute either directs shall be deducted from his pay, or that he himself shall voluntarily contribute, and it is only by interpreting the word 'salary' as meaning also the word 'pension' that any sum whatever can be realized for the pension fund from the pensioner. Assuming that the word 'salary' is intended to cover both salary and pension, and that the percentage governing in the former shall apply in the latter. . . . This duty rests upon the municipal officer, and not upon the pensioner, and it has been held in a number of cases that failing of such municipal officer to make such payments could not affect the right to pension."

Right to Dynamite Buildings to Check Fire

Since in many instances it is necessary for firemen to dynamite buildings for the purpose of checking fires, the recent case of Cook vs. Continental Insurance Company, 124 So. 239, presents unusual interesting information.

In this case a property owner held an insurance policy which contained the following clause:

"This Company shall not be liable for loss caused directly or indirectly by neglect of the insured to use all reasonable means to save and preserve the property at and after the fire or (unless fire ensues, and, in that event, for the damages by fire only) by explosion of any kind."

A fire originated in the business district of a city and, fanned by a strong wind, had traveled several hundred feet toward the east, consuming everything in its path. The fire department dynamited a large building and checked the fire which undoubtedly would have consumed the dynamited property, as well as other buildings, had it not been demolished. The fire insurance company refused to pay the insurance on the contention that the above clause in the policy relieved it from the payment.

However, it is interesting to observe that the Court held the insurance company liable, saying:

"Was it within the contemplation of the parties, in entering into this contract, to exclude liability resulting from explosion friendly to the interest of the parties to the contract, designed to check and save the insured property from destruction, or is it limited to hostile explosions, inimical to the interest of both parties, not caused by fire. . . . The intention of the parties must prevail. If that is clear, the Courts have no authority to change the contract in any particular . . . if doubtful, the Court will lean to that meaning most favorable to the insured, remaining, however, at all times within the terms of the contract, which is to say: 'Where the provisions of a policy of indemnity are reasonably susceptible of two constructions, consistent with the object of the obligation, one favorable to the assured, and the other favorable to the assurer, that will be adopted which is favorable to the assured.' . . . There can be no doubt that when fire precedes an explosion and spreads to the insured's building and there causes an explosion, the insurer under the standard policy is liable for the damage. . . . And in the absence of an exception which excludes the risk, a like liability follows when an explosion caused by fire occurs in a neighboring building."

The Start of a Serious Oil Well Fire

An oil well was "shot" in Ector County, West Texas, with three hundred quarts of nitro-glycerine at a depth of 3,722 feet. The shooting was done without any mishap and it was almost successful, but rocks hurled against the steel derrick created sparks that ignited oil clouds at the crown of the derrick. The resulting flames melted the derrick and other equipment. After twenty-four hours of hard work, the flames were extinguished with the aid of steam.

Samuel Hunt, Jacksonville, Ill., Dead—Samuel Hunt, fire chief for many years of Jacksonville, Ill., died as he attempted to drive his automobile out of a ditch. He was suffering from high blood pressure. Hunt is said to have been a full blooded Indian.

when!

You are interested in Fire Fighting Equipment consult:

BOYER

Builders of equipment to meet your requirements.
Specializing in Apparatus for Rural Fire Fighting.

BOYER FIRE APPARATUS COMPANY
Logansport, Indiana

Saves time - *and costly hose*

No. 1. (Capacity 3 to 7 tons; weight, each, 72 lbs.)

No. 2. (Capacity 3 to 12 tons; weight, each, 118 lbs.)

Complete information and Prices on request.

It's often necessary to move apparatus at a fire. Automobile traffic hates to be held up by a line of hose stretched across the right of way.

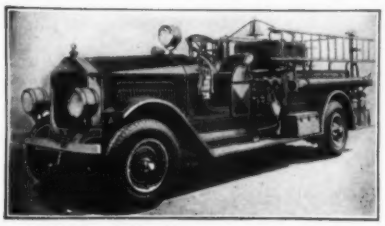
Why ruin your hose by driving over it? Or waste valuable time cutting off and disconnecting?

The Wausau Protector is a big time and money saver—easy to handle and carry. Order a set today, or write us for particulars

Wausau Fire Hose Protector Co.
1520 Harmon Place, Minneapolis, Minn.

MAXIM FIRE APPARATUS

All Types



All Sizes

If you are thinking of buying new apparatus shortly, be sure to get all the facts about MAXIM before you decide.
Send for complete information

MAXIM MOTOR COMPANY, Middleboro, Mass.
Metropolitan Sales Agents:
The Woodhouse Manufacturing Co., 156 Chambers St., N. Y.

Clifton Salvage Covers

Are made of strong, heavy duck and lapped seams and are designed of such thickness and weight as to be light enough to be handled quickly and rigid enough for the most strenuous service. They are rubberized on both sides with a double coating of a high grade, long life, rubber compound.

CLIFTON SALVAGE COVERS are built to stand the heaviest abuse and are used by many of the large Protective Departments.

May we send you further particulars?

Clifton Manufacturing Company
Jamaica Plain District :: Boston, Mass.

MORSE

FIRE BOAT EQUIPMENT
Invincible and Callahan Nozzles

Fire Department Supplies

are in use throughout the country and giving unsurpassed service.

Every fire official should be fully acquainted with Morse equipment and have our catalog and other descriptive literature on file for ready reference whenever considering the purchase of new equipment.

You will find that it pays.

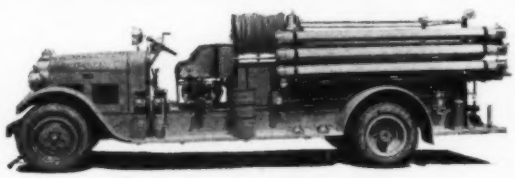
Write for Catalog

Andrew J. Morse & Son, Inc.
221 High St. Established 1837 Boston, Mass.

Fire Alarm Signals
Water Meters
Compounding Valves
Stops
Water Pressure Regulators

Presses for Lining Service Pipe with Cement

Union Water Meter Co., Worcester, Mass.
Incorporated 1868



HAHN

For dependable, efficient service, Hahn apparatus enjoys a most excellent reputation. Triple combination pumpers in all capacities up to 750 gallons, Chemical and Hose Trucks, City Service Trucks and Squad Wagons.

Full information upon request

Hahn Motor Truck Corporation
ALLENTOWN, PA.
20 Years' Experience Building Fire Apparatus

LARKIN Fire Department Supplies

in Service Wherever Fires Are Fought

Our general line of equipment includes every fire department supply of merit.

Larkin shut off nozzles alone are in service in over 5,000 fire departments in U. S. and Canada.

Give us an opportunity of quoting on your next requirements. Let us send you our general catalog.

THE LARKIN MANUFACTURING CO.
Established 1898 DAYTON, OHIO

FALSE ALARMS

THREE CHEERS

The chief who was a keen booster for trout fishing as a means of recreation, took one of his younger officers and went away for a short holiday. He had instructed the man how to reel in and how to catch the fish.

After a short while, the novice had hooked a very small trout and had wound it in until it was rammed against the end of his rod.

"What do I do now?" he asked.

The chief was disgusted.

"Climb up the rod and stab it."

It is getting to be quite a problem to get all of the vice-presidents of a bank together for a formal meeting without giving the depositors an impression that there is a run on the bank.

USUAL WAY

A lecturer who was scheduled to talk at the state short course for firemen, arrived the night previous and registered at a local hotel.

"How much are the rooms?" he asked.

"Two dollars and three dollars a day, sir."

"And what is the difference?" the guest inquired.

"The two dollar rooms are all taken."

A Scotchman ordered asparagus and by mistake left a tip.

SAFETY FIRST

The men gathered in front of the station were eye-witnesses of a most peculiar procedure. They saw one youngster fasten a muzzle on to his little brother. One finally asked:

"What's the idea of that?"

"Co's I'm sending him for some candy."

Personally we don't know the secret of success, but sometimes we are afraid it's work.

A CHANGE OF COLOR

The company chef was sick and it was necessary for the boys to patronize the neighborhood restaurant. As the waiter brought in the finishing touches of the meal, he remarked:

"It looks like rain."

"Yes, it does, but I ordered coffee."

VICE VERSA

Two Scotchmen had been members of the same company for many years and became very fond of each other. MacAllister retired from the department and bought a farm. MacGregor told him that he was going to make him a nice little present to add to his chickens, rabbits and pigs.

The first Sunday afternoon that MacAllister was settled on his farm, his friend visited him. After supper the guest smoked his host's tobacco and had a drink or two. MacGregor then presented his friend with a pair of homing pigeons.

A SOFT ANSWER

The deputy chief obtained a volunteer from his station to fix the door bell on his house.

The next day after he had consulted his wife, the chief called in the man to learn why he didn't do as he had volunteered to do.

"I did go, chief. But when I rang the bell three times and no one answered, I decided that no one was home."

Prohibition isn't the only thing that ought to be repealed. How about the potatoes that are served in some of the side-arm restaurants.

HANDICAPPED

There was the usual good morning salutations on the apparatus floor.

"Oh, gee, I'm tired. I could hardly keep my eyes open at breakfast," said one.

To which a quick wit replied:

"Why do you bother with grapefruit?"

About the only thing that comes to him who waits is whiskers.

SUBTLE SUGGESTION

A salesman who was forgetful of the other fellow's time, had already taken up considerable of the chief's busy day.

"Do you know," continued the salesman, "there was something I wanted to say to you, but I forget what it was."

"Was it 'Good afternoon'?" asked the chief.

HANDICAPPED

A civilian fire bureau inspector called upon the works manager of a local industrial plant, and instead of handing him his card, he presented a small picture of his fiancee.

"That's the department I represent," he said proudly.

The other examined the somewhat determined looking features of the young woman and returned the photograph with the remark:

"Young man, I'm afraid you'll never be manager."

HOT ANYWAY

In a mid-western city, by a strange coincidence the fire commissioner and a clergyman had the same names. The minister died. At about the same time the fire commissioner decided he needed a vacation and took a trip to California. When the commissioner arrived he sent a wire to his wife, but the message was delivered to the widow of the late preacher.

Imagine the distress of the good woman when she read:

"Arrived safely but heat terrific."

Instructor: (reviewing fire apparatus instruction) "Now, my boy, give me the correct name for the object with the large, round, hollow dome, that sets over the pump!"

Student Fireman: (reluctantly) "Well! Instructor! I don't like to speak of my Captain disrespectfully, but, as long as you ask me, to tell the truth, I'd call him a big, fat punkin head."

Your Catalog Page

Fire Protection Equipment and Supplies

1 Acid Siphons.
2 Adaptors for Changing Hydrant Threads.
3 Acid Jars and Rings.
4 Aerial Ladders, Detachable.
5 Aerial Trucks.
6 Alarms, Siren, Electric.
7 Alarm Systems, Industrial.
8 Alarm Systems, Municipal Telegraphic.
9 Alarms, Thermostatic.
10 Asbestos Clothing.
11 Badges, Insignias, Buttons, etc.
12 Banners, Trumpets, etc.
13 Battery Jars.
14 Battery Zincs for Fire Alarm Batteries.
15 Bells, Fire Alarm, Municipal
16 Body Equipments.
17 Boxes, Gongs, Reels, Registers, Fire Alarm.
18 Brakes, Air.
19 Brake Linings.
20 Brooms, Fire.
21 Building Materials, Fire Retardant.
22 Caps, Firemen's.
23 Chains, Non-Skid Fire Apparatus.
24 Chassis for Fire Apparatus.
25 Chemical Engines and Tanks.
26 Chimney Cleaning Compounds.
27 City Service Trucks.
28 Coats & Suits, Firemen's Quick Hitch.
29 Combination Chemical & Hose Cars.
30 Cutting & Welding Equimpent Blow Torch.
31 Cutting & Welding Equipment, Electric.
32 Deluge Sets.
33 Door Openers, Fire Station, Automatic.
34 Extinguishers, Calcium Chloride.
35 Extinguishers, Carbon Dioxide.
36 Extinguishers, Soda-Acid.
37 Extinguishers, Carbon Tetrachloride.
38 Extinguishers, Foam.
39 Extinguishers, Powder.
40 Fire Boat Nozzle Equipment.
41 Fire Department Supplies, General.
42 Fire Exit Devices, Door Opening.
43 Fire Alarm Posts.
44 Fire Escapes, Portable.
45 Fire Escapes, Rigid.
46 First Aid Equipment.
47 Flare Lights.
48 Flashlights, Hand.
49 Foam Liquid for Extinguishers.
50 Gas Masks and Respirators.
51 Gas & Smoke Helmets.
52 Gasoline & Oil Handling Equipment.
53 Goggles, Firemen's.
54 Helmets, Metal, etc.

Help Yourself!

This page is here to make it *convenient* for you to get complete specifications and prices from *reliable* manufacturers of equipment needed for your department. It is *your* page to use freely without any obligation.

To get the information you want, just mail in the coupon below with your name and address and numbers that indicate the equipment listed below on which you would like descriptive literature.

We will then notify reliable manufacturers of your interest in such equipment and request that they send you complete information. They will gladly do this and it will be a pleasure for us to help you in this way. No charge whatever! Help yourself!

Fire Protection Equipment and Supplies

55 Hose Carts, Reels & Racks.
56 Hose Clamps.
57 Hose, Fire.
58 Hose, Chemical.
59 Hose Holders.
60 Hose Jackets.
61 Hose Standardization Tools.
62 Hydrant Draining Pumps.
63 Hydrants, Fire.
64 Jacks for Fire Trucks.
65 Jacks, Shoring & Prying.
66 Ladders, Fire.
67 Lightning Arresters.
68 Motorcycles, Fire Dept. Equipped.
69 Nets, Life.
70 Nozzles, Pipes & Misc. Brass Goods.
71 Packings, Pumps.
72 Pads, Pole Hole.
73 Paints, Fire Resisting.
74 Priming Ether, Motor.
75 Pumping Cars, Standard.
76 Pumping Cars, Foam.
77 Pumps, Fire Apparatus.
78 Pumps, Fire Service, Stationary.
79 Pumps, Portable for Fire Protection.
80 Record Books, Fire.
81 Relief Valves.
82 Reviving Apparatus, Oxygen.
83 Rubber Clothing.
84 Searchlights.
85 Shingles, Fire Retardant.
86 Shirts, Firemen's Special.
87 Sirens, Apparatus & Chiefs' Cars.
88 Sliding Poles.
89 Soda & Acid Chemicals.
90 Spark Plugs, Fire Apparatus & Motorcyles.
91 Squad and other Auxiliary Cars.
92 Sprinkler Head Shut-Offs.
93 Sprinkler Supervisory Service.
94 Sprinkler Systems, Automatic, Foam.
95 Sprinkler Systems, Automatic, Water.
96 Starters, Fire Apparatus, Automatic, Air.
97 Steam Fire Engines.
98 Tarpaulins & Fire Blankets.
99 Tetrachloride Chemicals.
100 Thawing Equipment, Hydrant.
101 Tires, Fire Apparatus, Pneumatic, Solid, Cushion and Non-Skid.
102 Tractors.
103 Traffic Clearing Systems.
104 Triple Combination Pumping Cars.
105 Uniforms.
106 Water Towers.
107 Wheels, Cushion.
108 Whistles, Fire Alarm, Compressed Air
109 Whistles, Fire Alarm, Steam.
110 Whistles, Fire Apparatus.
111 Wrecking Trucks.

TEAR OFF HERE

FIRE ENGINEERING, 24 West 40th St., New York City
As a fire protection official I should like to have descriptive literature and complete information mailed to me, without cost or obligation, on the equipment indicated by the following numbers:

Date.....

Nos. .....

Nos. .....

Nos. .....

Nos. .....

Name .....

Position .....

Street .....

City and State.....

For Information on Any Equipment Not Listed, Write on This Page or Use Separate Sheet

5-28

New Victor Gas and Fume Mask

Better Rubber. Longer Life. Better Fitted. Moulded to Fit the Face. Better Vision. Renewable Lenses. Better Air. Better Work. Low Prices. High Quality.

Over 5,000 Victor Gas Masks in Service

Full Line Fire Dept. Supplies and Equipment

New 43 Edition Catalog on Request

The Woodhouse Mfg. Co., Inc.

156 Chambers St., New York

D. A. Woodhouse, Pres. and Gen. Mgr. — George J. Kuss, Vice-Pres. and Treas.

Always ready for instant use.

For Personal Safety use

DONTFEAR

Smoke and Fume Respirators

Positive protection against smoke, fumes and gases.

Price $5, Goggles $1 extra; Canisters 50 cents

Send for catalogue.

Don'tfear Mask Co.

654 Madison Avenue, New York, N. Y.

JOHN H. CLAY, INC.

1320 Ridge Ave., Philadelphia, Pa.

Established 1864

Clay Automatic Door Opening Devices for Fire Station Doors Opening either In or Out. Save valuable minutes in getting to fires. Send for Bulletin.

JACOB REED'S SONS

Founded 1824 by Jacob Reed

FIREMEN'S UNIFORMS

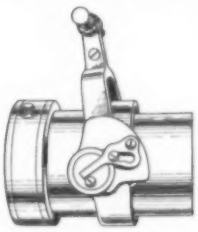
Thoroughly tailored of especially selected fabrics. Uniforms that look well, wear well and that will give entirely satisfactory service.

Reed's Uniforms are most economical because they represent full value for the amount expended.

Write for catalog and prices.

1424-1426 Chestnut St., Philadelphia, Pa.

The SHIFT COUPLER



Built to CONNECT and DISCONNECT instantly!

Any size hard suction

Years of Service Prove it the Best

National Standard Threadless Coupling Corp.

215-217 Beach 122nd St., Rockaway Park, N. Y.

11 W. 42nd Street — New York City

BODY GUARD

FIRE FIGHTERS CLOTHING

GIVES real protection and comfort in any weather and at any kind of fire. Designed to permit freedom of action, eliminating cumbersome excess weight. Made of materials that withstand the hardest kind of usage. Bodyguard apparel is used by Firemen everywhere.

BODY-GUARD BRAND

THE BODY GUARD MANUFACTURING CO.

ST. JOSEPH - - MISSOURI

COOPER ELECTRO-PNEUMATIC ALARM

In use for Years

Unlimited life

Nothing to get out of order

Powerful—Reliable—Instantaneous

Operates on only 1/10 amount of air required by whistles. Quickest device for coding. May be connected to present system and will operate if power is temporarily off. Produces a powerful and distinct sound audible for miles.

Manufactured by

CLARK COOPER

153-159 Jefferson St. — PHILADELPHIA

When in the Market for New Equipment

please write us and we shall be glad to have the right manufacturers provide you with complete specifications and prices for your consideration. This service won't cost a cent nor place you under any obligation whatever. We just want to cooperate both with you and with manufacturers in every possible way.

FIRE ENGINEERING

24 West 40th St., N. Y. C.

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Are You a Subscriber?

If you are not already on our regular subscription list to receive every issue of this magazine, issued every other Wednesday, we are sure you'll agree that you ought to fill out at once the blank below. It will bring you 26 wonderfully interesting numbers for only $3—payable any time within the next thirty days.

Do your Stuff along these lines:

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Position .....

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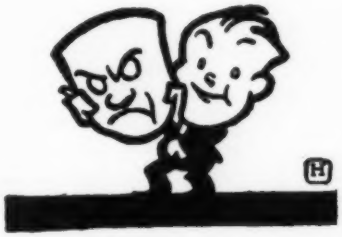

YES or NO?

It's up to you!

Just fill out and mail to Fire Engineering, 24 West 40th St., New York

Longer Reach With Shorter Ladders

Apply the new Pirsch Lapless Extension, and make any extension ladder reach 4′ to 8′ higher — with no more overhang on apparatus. Or, cut down overhang 2′ to 4′ without shortening ladder reach. A great improvement. Write for particulars.

PETER PIRSCH & SONS CO.

KENOSHA, WISCONSIN

B&M FORD SIREN

MADE TO FIT THE NEW MODEL FORD

PRICE 65.00

COMPLETE WITH DRIVE PULLEY FAN AND BRACKET

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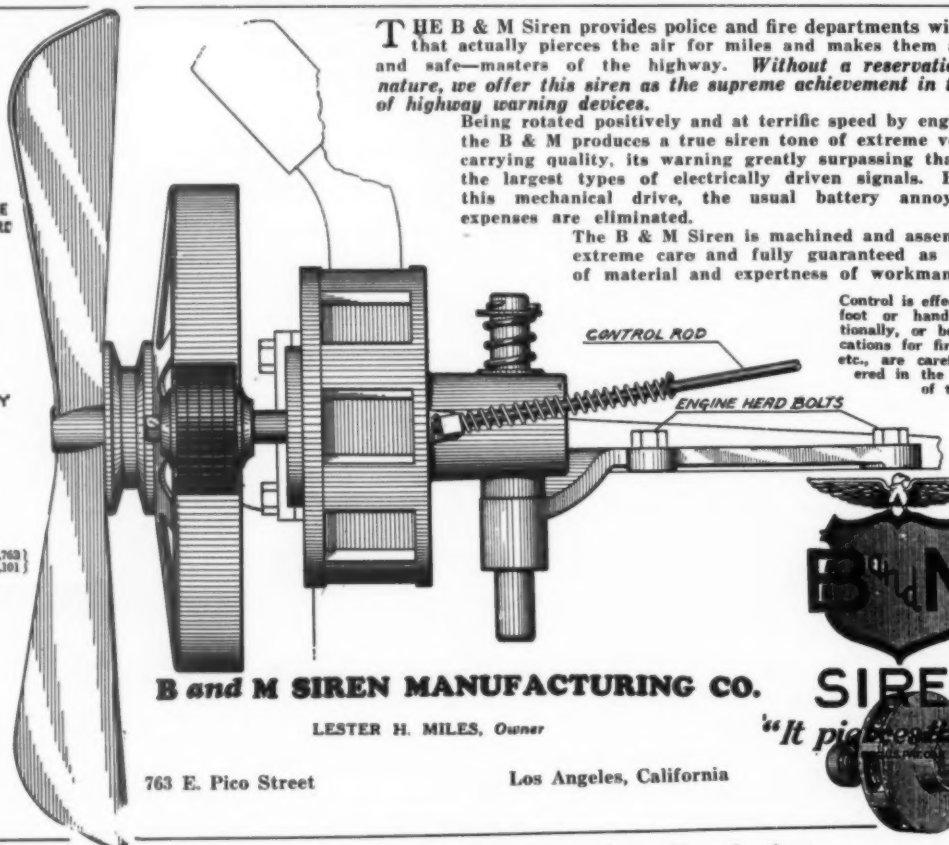
Others Pending



THE B & M Siren provides police and fire departments with a voice that actually pierces the air for miles and makes them absolute—and safe—masters of the highway. ***Without a reservation of any nature, we offer this siren as the supreme achievement in the design of highway warning devices.***

Being rotated positively and at terrific speed by engine power, the B & M produces a true siren tone of extreme volume and carrying quality, its warning greatly surpassing that of even the largest types of electrically driven signals. Because of this mechanical drive, the usual battery annoyance and expenses are eliminated.

The B & M Siren is machined and assembled with extreme care and fully guaranteed as to quality of material and expertness of workmanship.

Control is effected through foot or hand levers optionally, or both. Specifications for fire apparatus, etc., are carefully considered in the manufacture of these signals.

B and M SIREN

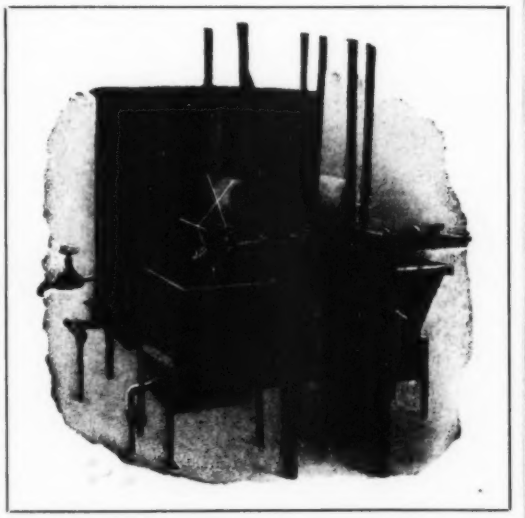
"It pierces the air"

B *and* M SIREN MANUFACTURING CO.

LESTER H. MILES, *Owner*

763 E. Pico Street Los Angeles, California

THE CHEAPEST CANNOT BE THE BEST—BUT THE BEST CAN BE THE CHEAPEST



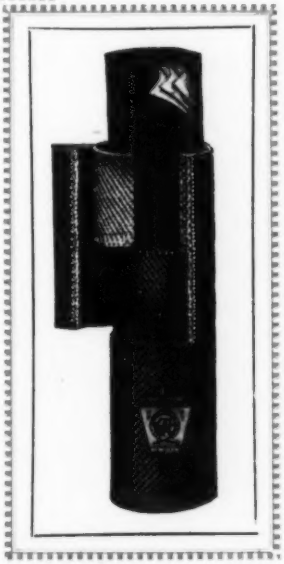
FABRIC

WAX AND PARA GUM TREATED COTTON

FIRE HOSE

THE chief that thinks he got a bargain in buying cheap hose is a discredit to his town, his men and to the fire fighting profession generally.

Many times during the short life of cheap hose it will be called on for *first-class service.* The lives of you and your men may have to depend on that cheap hose. If we could call your attention to our dependable long life FABRIC FIRE HOSE just at *those* times doubtless you'd prefer this really fine hose that is *built for service.* You alone are responsible for the hose you buy. Don't risk your reputation on inferior quality—get the story of FABRIC FIRE HOSE *now*—and let your conscience be free when the real test comes.



THERE is a little booklet that has been prepared to help you buy hose more intelligently, by explaining how good fire hose is constructed. Sending for this booklet and reading its message will start you toward the ultimate saving effected through the purchase of this wonderful hose. Where shall we send your copy?

FABRIC FIRE HOSE CO.

9-15 Park Place, New York, N. Y.
124-126 W. Lake Street, Chicago, Ill.

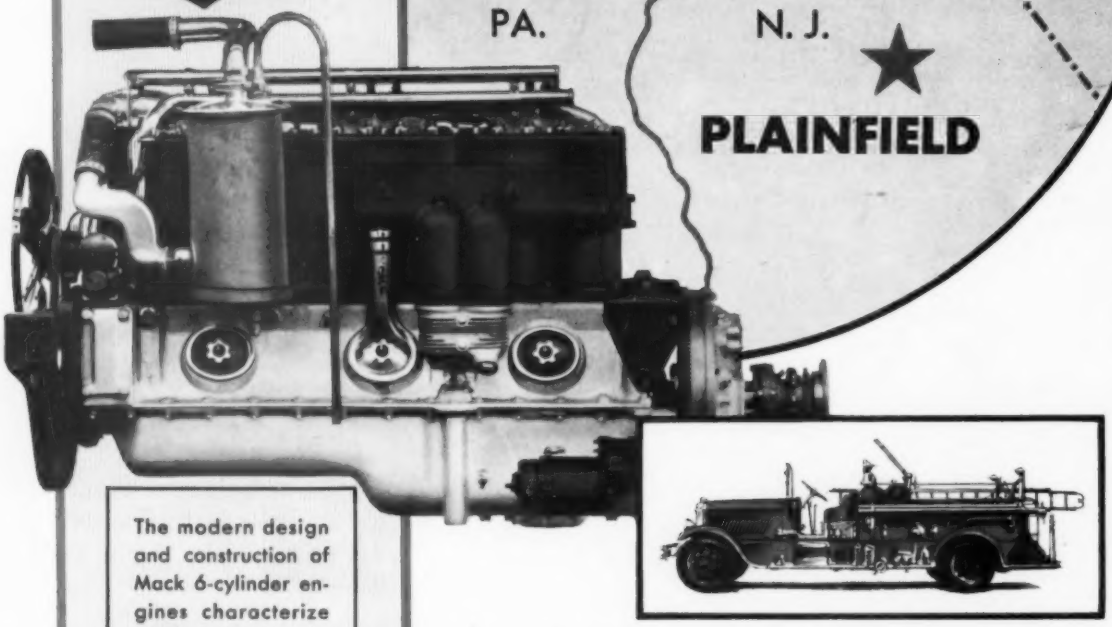
Atlanta	Columbus	Binghamton	Minneapolis	San Francisco	Newark
Boston	Dallas	Baltimore	Portland (Ore.)	Los Angeles	Pittsburgh

Mack FIRE APPARATUS

N. Y.

PA. N. J.

PLAINFIELD



The modern design and construction of Mack 6-cylinder engines characterize Mack-built chassis, pumping equipment and aerial ladder equipment.

Types of Mack Fire-Fighting Equipment

Hose Wagons

Chemical Engines

Combination hose and chemical

Pumpers

Triple combinations—pump, hose, booster (chemical)

Tractors

Tractor-drawn aerial hook and ladder trucks

City service hook and ladder trucks

Quadruple combinations—pump, ladders, hose, booster (chemical)

Squad cars

A NEW TYPE 19 CENTRIFUGAL PUMPER FOR PLAINFIELD ▼ ▼ ▼

WHERE MACK POWER PLANTS ARE BUILT

Mack engines are not without honor in their home town. For Plainfield, N. J., has several pieces of Mack Fire Apparatus—and the very latest is a Mack Type 19 1000-gallon Centrifugal Pressure-Volume Pumper. The efficient power plants that go into Mack Fire Apparatus are built at the huge Mack Plant in Plainfield, N. J. They are high compression six-cylinder engines far advanced in the acceleration and stamina that count in modern fire-fighting. There are many available engines for assembled equipment but only a Mack power plant is good enough for Mack Fire Apparatus.

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Fire Engine Division
25 Broadway, New York, N. Y.

Mack

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